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Dimensions of Buddhist Thought

Collected Essays

Francis Story







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Dimensions of Buddhist Thought

The Uniqueness of Buddhism



ost of our present day problems, including the great problems of social organisation and of war, have come into being through the lack of a clear-

cut and compelling philosophy of life. We do not know what, if anything, is life's ultimate purpose: whether it is to make the best we possibly can of a single life here on earth, or whether it is to strive for some higher and more lasting achievement.

The course of conduct laid down by necessity for those who see nothing to hope for beyond this present existence is fairly clear and straightforward. It is obviously to work solely and single-mindedly for earthly benefits. The more civilised and altruistic people who hold this view devote themselves to activities that shall benefit others, not primarily themselves. But there seems to be no valid reason why they should do this. The law of nature appears to be that each individual should take care of his own interests, irrespective of the welfare of others. And in fact, subject to the laws of society, this is just what the materialistic minded person does. His instincts prompt him to it, and there is nothing whatever in nature to suggest to him, that it is a harmful course. So while the rationalistic mode of thought gives us a handful of people who are disinterestedly virtuous, who love goodness for its own sake without any desire for reward, it gives us a far greater number who follow no principle except their own selfish wills, with natural law apparently on their side, for nature itself seems to favour those who can 'get away with it'.

On the other hand, the course for those who believe in a principle of right and wrong, and in a higher objective than worldly gain, while it is clear up to a point and on broad general issues, is very confused when it comes down to details. The major religions of the world all differ on certain points of conduct; and when it becomes a question of the basis of moral rules—the particular world view from which they spring—there is a hopeless disagreement. This is impossible to resolve because there is no manifest common fact of revelation to which they can point as their authority. Such authority as they claim is valid for themselves alone; it does not convince anyone else. And nature does not help them, for it is the most neutral factor of all in the conflict of religious ideas.

If we divide mankind into the followers of the two major creeds, materialism and, as its opposite, theism, we find that the former are much, more centralised in their world-view, and in a sense more united then the latter. They have, in fact, a much more solid basis on which to think and act, although necessarily a more restricted one as to final objectives. At the same time they have greater freedom to adapt their course of conduct, since they are not bound by any mandatory beliefs. The single object of materialism, wherever it is found, is to achieve mastery of the physical world by science and technology, and it follows that human values must eventually become subordinated to this end in a materialistic society. Man is to be perfected as a social animal, not as an individual.

On the opposite side of the picture we find a great confusion, a chaos one might say, of opinions unsupported by any one basic and unquestionable fact. The great worldreligions have never been in agreement as to the nature of man, his place in the cosmic scheme, or his final goal. The reasons for this are too many to deal with now; it is enough to note the situation as it is. Faith can be very strong; and when it becomes strong enough to exclude reason it becomes bigotry. That is precisely the defect of those worldviews that are established entirely on faith. When they cannot accommodate themselves to reason, or adjust themselves to particular aspects of knowledge on their own level, they are bound to become immoderate.

So far, we have glanced at two forms of religion, materialism and theism. Buddhism is radically different from both of them. As a world-view and a way of life it resembles what we commonly term religion, but there all likeness ends. The Buddha Dhamma refuses to fit exclusively into any of our categories of religion, philosophy, metaphysics, ethics and so on. It includes all of them, and its sum total transcends them. Since it also includes in its ontology the world-picture given us by scientific knowledge, it presents a complete and verifiable system of thought, and hence of moral conduct. I say verifiable advisedly, because from whatever point of view we choose to regard it we can find confirmation of its principles in the universe around us.

It is in this, perhaps, that its greatest superiority is manifested, for while, as we have seen, nature itself gives no support to other systems of moral values, everything observable in nature fits in logically with the Buddhist interpretation of the universe. The primal delusion of 'selfhood' is the governing principle of nature and from it spring all the evils of greed, hatred and delusion which we see all about us in the natural world, and which are certainly not confined to mankind: These factors are mutually supporting, the delusion of the 'self' and its associated craving for self-existence being the mother and father of all sentient life. It is simply to overcome and eradicate these two root conditions of suffering existence that the Buddha directed His Teaching. Hence we have in the Dhamma a system of morality that does not have to draw support from any source outside its own effective world-view, and does not have to reconcile an unmoral creation with the idea of a moral creator.

But this is only the negative starting-point of a very positive and constructive train of thought set in motion by the Buddha's discovery. The Buddha began with first principles, in the sense that He took known facts, not hypotheses, as the point of departure in His enquiry; and from these known facts He disclosed underlying causes and the way to remove them. The first and fundamental fact of life is suffering. Do what we may, either as materialists or idealists, we cannot remove suffering entirely from life. A sentient being must have the capacity both to enjoy and to suffer; he cannot have the one without the other, for either without the other would be meaningless. The graduated modes of mental and bodily sensation can only exist between these two polarities, pleasure and pain. So birth in any realm has to be associated with suffering as an integral part of its nature. And the suffering is infinitely more frequent, more inevitable, than the pleasure.

Then why is it that we live at all? What is the reason why, having been born, we continue to live on, no matter what sorrows, injustices, misfortunes and disillusionments we encounter? There can be only one answer: clearly, it is because we desire to live. Our desire for life is the desire to continue experiencing sensations; to continue being conscious of sense-reactions, to continue being aware of the world and of people about us. Therefore, the root cause of living is the life-affirming desire and craving for renewed experiences.

This is the second of the Four Noble Truths discovered by the Buddha: that life conjoined with suffering is caused by craving. It led naturally to the third: namely, that as there is an end implicit in all beginnings, there must be the possibility of an end of craving, and so an end to the clinging to life that causes repeated rebirth. This end is the cessation of the fires of craving, ill will and delusion, and from all the effects that arise from them, and it is called Nibbāna. The Fourth Noble Truth gives us the means of attaining Nibbāna, which is the Noble Eightfold Path embracing *sīla*, *samādhi* and *paññā*—morality, mental concentration and insight wisdom. It is visuddhi magga; the path of purity, and also *majjhima paṭipadā*, the middle path between the two extreme views we have been discussing.

This is but a brief summary of the Teaching of the All Enlightened One, which in its completeness is the most rational and consistent plan for living that has ever been shown to the world. If we are to call it philosophy, we must realise that it goes far beyond philosophy; if religion, that it is based on facts and verifiable conclusions, not upon ancient mythology. It makes no appeal to blind faith, and cannot be overthrown by the enlargement of scientific knowledge. It stands lofty and unshakable through the ages, and is as fresh, today as when the Buddha first proclaimed it.

The Noble Eightfold Path is a practical way of thought and action, not a mere theory. It is no use studying abhidhamma and ignoring the five precepts; it profits us nothing to practise mindfulness (*satipatthāna*) unless we use it as an instrument to clear our minds of self-delusion and the faults of character that arise from it. To think in terms of anattā will not help us if we still continue to act as though there were a 'self', and that 'self' the centre of the universe, harbouring pride, resentment and greed connected with something which we say does not exist. The knowledge of anattā must be something more than a theoretical concept or a convention of speech; it must be realised, so completely in the inner structure of our minds that it colours our whole outlook, and from that our actions. To follow the Noble Eightfold Path successfully we must not cherish delusions about ourselves; that is one of the first essentials.

Applied in this way, Buddhism enables us to set our thinking straight, which is the first step towards wisdom. There is altogether too much confused and contradictory thinking in the world today; as there has been all through human history. The mere fact of being a Buddhist will not correct this; we have to use the Teaching of the Buddha intelligently and constructively. We have to learn to see life exactly as it is, and not obscure our vision with rose-tinted spectacles that falsify the picture. There is no escapism in the Buddha Dhamma. We are not invited to turn our backs on the uncomfortable truths of life, but to face them boldly, march straight ahead, and come out triumphantly on the other side as conquerors. That is the meaning of '*Appamādena sampādetha*'—'Strive with earnestness'.

We have only just entered on the 2500th year of the Buddha sāsana, and this is a great opportunity for the whole world to hear the Buddha's doctrine of deliverance. There has never been a time when it was more needed, to put an end to the doubts and perplexities that beset mankind. It is the privilege of the Buddhist peoples of Asia to show forth its greatness and uniqueness, and there is only one way to do this—the way the Buddha Himself commended. That is by following His teaching in all the actions of our daily lives, both for our own benefit and that of others. Those who are fond of old proverbs will not need to be reminded that 'example is better than precept'. The whole aim of Buddhists now should be to follow the precepts, and thus become an example.

Radio Talk, Rangoon, August 23, 1956.

Beauty and the Buddhist

I remember a golden afternoon that I sat and watched transform itself into an orange and purple evening by the sea at Ambalangoda on the Ceylon coast. Far out to the horizon the ocean lay like an expanse of rippled silk, iridescent under the changing light, and the sand glowed with silver heat like metal molten from the furnace. Palms and beach and waves were negligently thrown together under an enormous, impersonal emptiness that throbbed with pure light.

Into my mind, as the light lessened its intensity and the sinking sun began to suffuse the sky with crimson, there came a phrase, read many years ago, with which H. de Vere Stackpoole opened one of his romances: "The sunset held a cloud, red as a flamingo's wing, over Korea." I have always thought this, in its simple brevity, one of the most evocative descriptive phrases I have ever known. The sunset, the single cloud like a flamingo's wing, and the distant coast of Korea together formed a picture that stirred my imagination and left one of those indelible imprints on the mind that we carry with us from childhood all through life. I was many miles from Korea and Japanese waters—in fact, I have never been there—but the phrase is one that had sprung unbidden to my mind many times before, in even more distant places and less likely settings—the coast of Brittany, Cornwall and County Donegal.

It started a train of musings connected with all those places and many more, the spots where earth had seemed to me a fair and lovely thing, and where I had gathered the magic of a hundred poets about me to testify to beauty. It was Robert Bridges who wrote,

I love all beauteous things, I seek and adore them; God hath no higher praise And man in his hasty days Is honoured for them.

These are the words of a man who loved loveliness, an artist who knew no other honour than to be a creator of beautiful images, phrase's of glowing splendour and soaring imagination; who hymned the wonder of life and its endless diversity.

But into this gallery of memories steps the portrait of the artist as Buddhist, and the key of the composition changes. For long before I could fashion out of my own bewildered sense of beauty those formal and enduring images of it that the artist gives us as testimony to his vision, I had learned to look upon nature, upon life itself, with different eyes. It was no longer the masterpiece of a supreme artist; no longer, for me, the transcendent fact of truth in creation. Instead, I had become aware of the subjective nature of this love of beauty, of how much it is fashioned from habits of thought and an accustomed aesthetic approach. I had begun to question the very principle of beauty, those canons which change from generation to generation and so widely differ among different races. I had become aware of a diversity of standards—the standards of the African and the Chinese, of the men who found beauty in the distortion of natural forms; and also of those who, like the Stoics, opposed an austere intellectual and moral beauty to the beauty that captivates the senses.

It has been my experience that people who live out their lives in the midst of natural beauty seldom have any spontaneous appreciation of it. The farm labourer and villager look upon the glories of the sunset only with a calculating eye to tomorrow's weather, and the changing moods of nature pass them by almost unobserved save when they have some practical bearing on their needs. The nature poet is an urban product, a phenomenon thrown up by the unnatural conditions of industrialism and centralization. Those who, like the Ettrick Shepherd, really were countrymen, simply followed the prevailing literary fashion of their time; had they not read or been told about the beauties surrounding them, by other poets to whom these were exotic elements, it is doubtful whether they would have noticed them. Primitive poetry is poetry of action, in which purely descriptive passages are only incidental, and then often limited to formalised, familiar

phrases. It is a far cry even from the Odyssey of Homer to Gray's Elegy and the romantic poets of the English lakes.

The real countryman of every land takes a severely utilitarian-not to say economic-view of nature, and who shall say he is wrong? For him, life is a struggle, his strength pitted against earth and elements, and every man's first concern is to live. He is a part of nature, of the unceasing Sturm und Drang, not the detached observer from the urban reservation where-like the American Indian-men of all kinds lead a life divorced from its primitive background of physical stress and conflict. The illiterate peasant, living in close intimacy with nature, has no illusions about it. Like the Buddhist, he realises that under the enchanting variety of its forms and moods an unceasing war is being waged. Every foot of verdant grassland on the peaceful slopes of the Sussex downs has as much pain, fear and death hidden in it as any battlefield; it shrieks aloud in the jungle-agony of life that is incessantly becoming death. Every drop of water from the still, clear lake is a minute concentration of Armageddon, the horrific battle-ground of microscopic monsters. Titanic contests are fought to their bitter and bloody conclusion in the hedgerows, beneath the trees, in the tunnelled earth itself. Rapacious and devouring, life stalks through the silence of midday and night; and death, that seems to be its opposite, is ever beside it. We take a second look at life, and we find that it is death. They are one and the same.

Linnaeus, the great Swedish naturalist, who had the heart of

a poet, fell on his knees at the first sight of the flaming gorse on Putney Heath and gave thanks to his God for creating such beauty. But rather he ought to have meditated on that concatenation of causes that had given him aesthetic appreciation. For beauty does not reside in the object but in the reaction of the observer, which in its turn is conditioned by many external factors. Supposing, for instance, we were visitors from another planet, where all the natural forms of animals, flowers and even topography, were different from those on earth. In such a case we should see, perhaps, only a vulgar or hideous assault on the eye in the flaming gorse, or in the vivid colour of a gold mohur asserting itself against a curtain of green and purple. We should long, perhaps, for the grey, mud-coloured fungoid growths of our remote planet, where the rays of the sun had never attained enough power to work the alchemy of pigmentation, had never conjured rich and glowing colour out of the drab chemicals of earth. For us, then, these would constitute beauty; for beauty's magic can work only in two ways-either by the shock of surprise or by the perfection of accustomed standards. And even when it comes with the shock of astonishment, it must have in its composition some element with which we are already familiar—of colour, of shape, of harmony in proportion and design. The most revolutionary painter, sculptor or composer has never devised a new form of his art that bears no relation whatever to what has gone before. If it is a reversal of the accepted modes, it still asserts a relationship to them; it cannot come out of nowhere and

exist in majestic isolation.

And so with nature, we unconsciously train ourselves to see through the eyes of others the anticipated glories of dawn and sunset, and we accept them as beautiful because we know no other standards of beauty. The too-often quoted lines of Keats: "Beauty is truth; truth, beauty. That is all we know and all we need to know", exemplifies the traditional poetic attitude. In its highest sense it does express a truth of the spirit; the laws of the cosmos are beautiful in their regularity and precision, and the justice of kamma is the perfection of beauty in the abstract. But if we interpret it to mean the beauty of phenomenal things, then we are plunged not only into mental confusion but deeper into that craving which is the basis of the round of rebirths. Confusion, because we take relative and arbitrary forms, sounds and so on to be the substance of a real and enduring beauty, whereas their aesthetic value lies only in our own conditioned appreciation of certain modes of phenomena limited by our experience. We have no yardstick by which to measure beauty, no standard of the absolute—only these familiar things between which we discriminate and on which we set up our own scale of values.

And these values tend to be increasingly individualistic as time goes on. By a process of elimination we become more and more restricted in our range of appreciation, and less ready to conform to the world's general standards. Or at least we should do so. The refining trend of maturity should make us selective, and this is one means that can be used to haul us out of the sticky swamp of saṃsāra. Becoming less avid for life, we become more critical of what it has to offer us—harder to please, in fact. The Epicurean merges imperceptibly into the Stoic. At the point where we come to be disillusioned about even the beauties of nature, seeing in them only impermanence, suffering and unreality, we stand on the threshold of the last and most enduring temple of beauty—that beauty which is indeed truth—and we hold in our hand the ticket of admission.

But I must say it is very hard for a Buddhist to be a poet, if by poetry we understand a song of gladness, of exultation in the act of living. Perhaps, it is significant that the more recent trends in poetry, from T. S. Eliot onwards, have been towards a definitely Buddhistic outlook on life. And if they are pessimistic, it is only because they lack that final assurance of truth behind illusion, of order emerging from disorder, and that supreme insight, beyond even the poet's vision, that only the Dhamma can give.

The Buddhist World View in the Age of Science

1. Evolution by Craving: The Buddhist Genesis

During the nineteenth century when the Western World began to be dazzled by the accumulating achievements of science and the amazing vistas of progress that seemed to be opening up in every direction, a belief arose in the inevitability of human advancement through technical mastery of nature.

It was then thought that this progress was bound to lead to an age of perfection when mankind would be the heir to all knowledge and virtue. The belief was strengthened by the current theories of Darwinism, which seemed to teach that the evolutionary process made a steady and regular ascent from crude forms of life to higher and more refined types. A facile philosophy of optimism was born, which placed its faith in the parallel development of technical knowledge with moral and spiritual growth, and mankind was thought to be firmly established on the upward gradient which would ultimately lead to the dreamed of age of absolute righteousness, wisdom and plenitude of power. Since that period the world has been disillusioned. It has been found that progress in the material sense is not necessarily accompanied by growth of wisdom or deeper understanding of spiritual values. Mankind now has command of tremendous material forces, but does not know how to use this power for beneficial ends. Instead, the tendency of man is still to employ whatever knowledge he has gained in the oppression and destruction of his fellows. The madness of greed, for possessions and for power, points a finger not towards perfection but towards self-destruction, and the gifts of science are only being used to hasten humanity on the fatal road. As H. G. Wells, once a firm believer in evolution through knowledge, pointed out shortly before his death as a disillusioned man, the human being is like a clever monkey, possessing dangerous toys which it does not know how to handle safely, or how to put to a good and constructive purpose. Man's spiritual growth has not kept pace with his increased command of technical knowledge and he is like a lunatic loose in a power-house.

A better understanding of the natural laws of evolution has also gone to show that the shallow optimism of the early followers of Darwin was based on a fallacy. Natural evolution in the biological sphere is not a steady upward progression as it was once thought to be. It is a hazardous series of experiments, some of them successes but the great majority failures. Numbers of different species have evolved in the course of this evolutionary process, only to become extinct on account of their inability to adapt themselves to

changing conditions. Evolution is accompanied by retrogression; species become degenerate and go down in the scale, and there is no indication of any external guiding principle aiming at a definite goal. The entire process is seen to have been carried out on the principle of trial and error, a blind groping, and we can no longer have confidence that our own species has any assured future because of its long upward struggle. The human race too may degenerate may, in fact, be the result of a degeneration that preceded the earliest traces of primitive man-or may eventually bring about its own extinction through defects inherent in its own nature which intellectual development alone has failed to overcome. The ascending line of intellectual progress may indeed be the descending curve on the side of spiritual development and hence our entire concept of evolution may be false.

Buddhism teaches that the basis of all life, the mainspring, as it were, of the vital principle of living beings is craving. The facts of biological evolution most strikingly confirm this. We are brought face to face with the hidden machinery of evolution only when we acknowledge the power of craving as a dynamic force which is capable of making matter obey its mandate. Just as a man, working on the basis of his own imperfect judgment, commits errors in striving for the attainment of his object, so the process of evolution also is seen to have been a myopic, undirected force feeling its way towards a goal not fully comprehended. As we understand it now, the history of evolution presents a

different pattern from that which was first suspected, and we are able to point to craving as its motivating factor. The various species of living beings which have all evolved from a very simple prototype, the single-cell amoeba, show how, over countless millions of years, more and more complicated organisms have come into existence, each developing by branching off from an earlier type, and each in turn reaching a higher degree of sensory perception than those preceding it. Behind all this complicated process we find the sole driving and directing force to be the craving for increased and more accurate sensory experience, which can only be obtained through improved faculties of mind and body. In the lower animals the organism is simple and relatively insensitive; its sphere of sensory experience is restricted and its perceptions dim. In the course of evolution it acquires a more complex set of sense organs, each one ministering to a particular need, not all of which are utilitarian. The acquisition of a more sensitive organism cannot in each case be attributed, as was once believed, to the needs of survival. In some instances, far from helping the species to survive, the development of a more delicately adjusted physical mechanism has made it more vulnerable. If the scheme of evolution were solely directed towards survival the single-cell, self-propagating prototypes would have fully answered the purpose and evolutionary progression would not have needed to pass on to any higher stage. It is permissible to assume, therefore, that some at least of the characteristic physical changes brought

about by mutations within the species were not evolved only to perform a utilitarian function, but also to meet a need that may fairly be called hedonic. What becomes apparent is a blind force whose sole objective is an everincreasing field of sensory experience. Its motive is the equivalent of what in psychology is called the 'pleasure principle'.

It is thus possible to trace two principles at work, one aiming at preservation and the other no less clearly directed towards the extension of hedonic experience; but it must be understood that preservation of the species is only an incidental to the need for attaining the more important goal of hedonic fulfilment. We have already seen that the evolution of species does not take a uniform upward trend, but that it branches off into blind alleys and forms subsidiary waves that rise and fall independently of the general trend of the current. It shows long periods of seeming lack of progress during which no fresh mutations occur, or in which species that have already over-specialised in fitting themselves to their environment succumb to changing climatic or other conditions. There is, for example, the case of the giant lizards, glorified in folk-lore and tradition as dragons, which became too vast and cumbersome to support their great bulk on a gradually thinning vegetation during the successive ice-ages that crept over the earth's surface when the terrestrial sphere, perhaps influenced by the proximity of another planet, swung on its axis, and what had hitherto been the tropics became polar

regions. The same fate was shared by the mastodons and mammoths, whose gigantic remains are still found in the wastes of Siberia and the Arctic Circle, frozen for millions of years in glaciers that were once tropical swamps.

These enormous animals perished and became extinct because they had specialised in size and physical strength. Under the changing conditions these assets were no help to them; they were, indeed, a handicap, because of the great quantity of food required to sustain them. The animals that did survive were the creatures of smaller size and more active brain, particularly those that had developed prehensile toes for climbing, and could reach vegetation beyond the reach of the largest mastodon. These smaller animals had other advantages; they could creep into crevice's for shelter, and even extemporise rough covering for themselves by using their supple toes to manipulate twigs and dead leaves as a gorilla even now makes its nest from whatever material it can find. These animals had yet another instinct which helped them in their extremity; they were gregarious, moving about in groups for mutual protection and in this way they were able to migrate en masse to warmer regions, while the mammoth and the mastodon perished alone in the frigid wastes that had formerly been their grazing grounds.

But most important of all was the fact that some of these small animals, a type of anthropoid ape, under the compelling force of urgent necessity had developed a rudimentary power of reasoning. Instead of mechanically repeating the same habitual actions prompted by some racial memory stamped upon their brain formation, as did the others, they specialised in a quite new function—that of independent thinking. Obeying the behest of the shadowy consciousness that was awakening within them, further physical changes took place; their toes grew longer and more flexible, becoming in time efficient instruments for carrying out the directions of the brain. From using these toes to pluck fruit and dig up roots they came to employing them for covering themselves with leaves against the cold, and thence to manufacturing rough weapons and tools from bones and flints. In this way the first manlike animals appeared upon the earth. Their bodily structure and capabilities were clearly the outcome of mental predispositions brought into being by the exercise of this new faculty of independent thinking.

Here it becomes necessary to take a brief glance at the story of evolution as presented in the Buddhist Canonical Books. Excluding commentary and tradition, the most complete account is given in the Aggañña Suttanta of the Dīgha Nikāya. Explaining the process to Vāseṭṭha (a Brahmin, be it noted), the Buddha tells how at some time, after the lapse of an incalculable period, the universe passes away. When this happens, the beings are mostly reborn in the world of radiance, an aetheric state where they dwell formed of mind, sustained by rapture, self-luminous, space-borne and remaining in a state of immaterial splendour for many ages. Sooner or later the universe begins to re-evolve, and the mind-formed beings, deceasing from the World of Radiance, usually take rebirth on earth. The sutta, it should be noted, does not specifically state what form they take, and certainly does not call them humans (manussa); the phrase used is, literally, that they "come to hereness", and Buddhaghosa says that they are born by spontaneous generation (opapātika), a very significant phrase when we consider the scientific theory of the first generation of life from chemical combinations and solar radiations, possibly cosmic rays, on this planet. The description of the earth that follows indicates a state that closely corresponds to the period known to geologists, when, after the formation of the Fundamental Gneiss, an age ensued during which the steam in the atmosphere began to condense and fall down to earth pouring over the primordial rocks and gathering into depressions as lakes and oceans. This must have been a period of thick clouds and darkness; in the actual words of the sutta, "one world of water, dark, and of darkness that makes blind". A more accurate description could not have been given by an eyewitness. Next follows a description of how the beings, sexless, lived on the scum spread out on the surface of the waters; a perfect account of the existence of the primordial protoplasm from which all life began. The remainder of the Sutta is a detailed, though necessarily somewhat allegorical, account of how craving arose in the beings. They took to feeding on different substances, losing their ability to live on the mud and scum that had formerly nourished them, and gradually over long ages, themselves

became differentiated species taking various forms, some ugly, others beautiful.

Is it indeed too much to see in this an indication of how certain branches of these beings, as they developed more specialised organisms along the lines science tends to show, became apes and other mammals, while others developed into human beings? I have spoken of allegory, but in fact, there is very little allegorical element in the description given by the Buddha—only the very minimum needed to make His Teaching clear to the Brahmin Vāsettha. It is practically a literal account of the process. Those who still doubt whether biological evolution is consistent with Buddhism should study the Aggañña Sutta with understanding and in the light of modern knowledge, and then compare both with the magical accounts of creation given in other scriptures. The more the understanding of the student of Buddhism deepens and widens, the more he becomes amazed and impressed by the further proofs of the Omniscience of the Exalted Buddha that become revealed to him

2. Knowledge and Concepts

"Ignorance is the foulest stain of all" declared the Exalted Buddha, and by ignorance, He meant the belief in self and all the wrong thinking, wrong actions and wrong speech that arise from it. Ignorance is the primal condition behind all manifestations of life; it is the creator of space and time and consciousness and all the phenomena that have their existence in the space-time complex throughout all the realms of becoming.

It is given as the first link in the chain of dependent origination, but this does not mean first in temporal sequence; it is not to be confused with the idea of a first cause, since dependent origination has no temporal beginning. To understand this it is necessary to consider the nature of time itself. Time-that is to say, our knowledge of it, for it has no existence outside the sphere of phenomenal relativity—is governed by the movements of bodies in relation to other bodies, the rotation of the earth and its revolution around the sun, together with the movements of other suns and planets that compose the universe and the dearer and more familiar movements of objects in our immediate vicinity. Because movement (time) implies change of position (space), the two concepts of space and time must be identical: they cannot be considered separately. From this we get the space-time complex of Einstein, an interrelated and interdependent combination of ideas that forms a single concept in mathematics. Without material bodies and physical space-that is, the dimension they occupy—there could be no time. ^[1] Without time nothing could come into existence, and without the existence of phenomena there could be no time. Hence it is meaningless to talk of the beginning of 'creation', or of a

first cause. Creation out of nothing can only mean the creation of time, since time cannot exist in nothingness, and to create something that did not exist previously itself implies the prior existence of time, because there must be the threefold condition of time already in existence to make such an event possible. There must be 'past', the time when the object did not exist; 'present', the time of its creation, and 'future', the time of its continuance. So we are driven to the conclusion that, as Buddhism insists, there could never have been a time when samsāra and a physical universe in some form or another did not exist. Again we must refer to the statement in the Anguttara Nikāya: "Beginningless is the process of samsāra; the origin of beings revolving in samsāra, being cloaked by avijjā (ignorance) cannot be discovered." The universe of space and time, the creation of *avijjā*, is a closed circle of conceptuality in which there is no first cause. It therefore cannot be understood or penetrated by any intellectual means for the mind itself operates within its complex mechanism and is bounded on every side by its related conditions. Ignorance may be called the essential infirmity or limitation of the intellect. It is bound to the processes of cause and effect, yet at the same time itself creates from moment to moment the process and the conditions. The mind moves like a prisoner confined within its own constructions; it cannot get outside the orbit of its own limitations and so cannot see the process in its entirety or understand its own nature.

All relative concepts are unreal *because they are relative*. They

cannot have any existence in an absolute sense. As Bergson pointed out, no object in the whole universe can be isolated from other objects and known as a 'thing in itself'. If we try to describe its shape, calling it square or round, we are merely making a comparison between its shape and the shape of other objects that are not square or round. The same thing happens when we think of its texture, colour, weight, smell or any of the other data concerning it that come to us through our senses. All our knowledge is comparative only; our minds are not equipped to deal with concepts outside the realm of comparisons and relative values. Therefore, the thing we know has no real existence; if it had real existence we should be able to cognise it in isolation, without reference to anything else. This is the meaning of the Buddhistic "sabbe dhammā (or sankhārā) anattā" all phenomenal (compounded) things are void of reality or self-existence. The material, composite world is nothing but an appearance, based on the illusory activity of the mind. How, then, is the mind to attain liberation from a condition which is intrinsic to its own nature? That is the problem which it took the Buddha six years of arduous striving to solve. The answer is, to destroy all false concepts, beginning with the fundamental delusion of the personal Self on which all the others are based. This is to be achieved by realising, through insight, the impermanent, painful and unreal nature of all phenomena; the anicca, dukkha and anattā of everything, including the constituents of personality. These three concepts, the most important feature of the

entire system of Buddhist thought, are in reality only three different aspects of the same truth. That which is anicca, impermanent, must necessarily be subject to suffering. Its suffering consists in the state of restlessness, unbalance and continual agitation of its component elements; the incessant arising, decay and passing away of the units of atomic and electronic energy that compose its physical substance. In the Buddhistic sense, dukkha means not only suffering associated with consciousness but also the state of disturbance and unbalance in all phenomenal things. It is to be thought of as a cosmic principle, ubiquitous and allpermeating, existing in the nuclear structure of the atom as well as in the growth, decay and death of the physical body and the arising and passing away of the successive moments of consciousness. Wherever there is movement, the state of flux, there is dukkha—and this means everywhere; it is present in both sentient and insentient matter. Abhidhamma teaches that dukkha is present in all of the Thirty-one Abodes of samsāra, including the realm of the asañña-satta (unconscious beings). These beings possess only one of the Five Constituents of being, rūpakkhandha. They have material form only, without consciousness, for the duration of their existence in the asaññasatta brahma-loka. This demonstrates that, philosophically speaking, suffering exists even in insentient substance.

Where the two first conditions, impermanence and suffering, exist, there cannot be any real selfhood, since all is momentarily undergoing transformation. It is a state of becoming; not of being; it is always a transitional stage from one state to another. Therefore it must be anattā; there is no permanent self or soul of a being or even identity of an object from one moment to another. All that can be found is a causal process, a current of causal dependence. Science tells us that there is no actual identity between an atom at one moment and what we choose to call the same atom at another moment; its existence is merely a linked chain of causal relationships, a current of activity or energy. In the same way, there is no real identity between the infant, the child, the youth, the man and the old man, though for conventional purposes we have to consider them the same person and call them by the same name throughout the different stages of life. All the physical cells of the body die and are replaced many times during the course of one lifetime, and the body itself changes in appearance through the gradual accumulation of these minute changes. Similarly the consciousness, the contents of the mind, its reactions and so on-all are different at different stages, while the fluid current of consciousness, like a river, flows past, bearing only an illusory identity from one moment to another, as a river is seen as a river only by the general contour of its banks. Heraclitus, who declared that it is not possible to step into the same river twice, was thinking Buddhistically. There is no permanent factor—no attā or essence of selfhood-to be found anywhere in the components of personality, either physical or mental.

Many Western philosophers have arrived at the same

conclusion as the Buddhist with regard to this universal condition of flux and unreality, but to realise it intellectually is not enough to liberate the mind from its conventions. The mind can only know this fact in its negative aspect; it cannot, as we have seen, be expected to penetrate beyond the phenomenal and have direct knowledge of the noumenal. In order to do this the mind must conquer itself; it must be mastered and even be transcended, and it is only possible to achieve this result by meditation.

Meditation begins with concentration; it requires first of all that the activity of the mind should be controlled and fixed in complete stillness, its restless motion brought to a focus of one-pointedness (*ekaggatā*). When this is achieved, the whole force of its concentrated energy must be brought to bear and fixed on an object of meditation. In Buddhism there are forty of these kammatthana, each one being suitable for a particular type of mind. When the meditation is successful it brings about a state of realisation that is beyond anything accessible to the normal consciousness, carrying knowledge right outside the illusory barrier of phenomenal appearances into the 'unconditioned reality' (asankhata dhamma). With this state comes the cessation of all the impurities of consciousness, the end of craving for existence or for material things, for sense enjoyments and all other attachments that imprison sentient beings in the process of samsāra. Hence it is called 'Nibbāna'-the extinction of the fires of lust, hatred and delusion. Not the extinction of Self, because Self never existed, but the end of

the illusion of selfhood. When the reality is known and experienced, unreality has no longer any meaning or attraction. When freedom from the thraldom of the six senses, and from attachment to material existence is attained there can no longer be any craving for individual rebirth, with the result that rebirth ceases, and with the end of rebirth comes the end of *anicca*, *dukkha* and *anattā*.

The Buddha did not try to describe Nibbāna. That which does not come into any of the categories of ordinary experience cannot be described. There is no vocabulary for it because there is no ground of common experience on which the meaning of words used to convey it could be understood. Language can be used only concerning relative things; there is no language or mode of speech for that which is unrelated to anything else. Had the Buddha tried to describe Nibbāna, He would have falsified it by using the terms of phenomenal experience, which are not applicable. That is why He refused to answer questions about Nibbāna, even though many people thought, because of His silence, either that Nibbāna is annihilation or that the Buddha Himself had not experienced it. Both views are wrong, Nibbāna is not annihilation, for there is nothing of a self to annihilate; it is annihilation only in the sense of the extinction of the fires, of craving, hatred and delusion. Nibbāna may be called Reality, so far as that word is not misunderstood to mean God, Spirit or any other anthropomorphic concept: it is the sole reality as distinct from the changing forms of the transitory world. There is a

great danger in using any word to serve for 'Nibbāna' except Nibbāna itself, because everyone tends to put his own interpretation on a particular word, according to his own associated ideas; and as we have seen, such ideas, since they are formed by and bound up in relative distinctions, sometimes highly individual and personalised, are certain to be misleading. It is a further proof, if any were needed, of the genuineness of the Buddha's enlightenment that rather than give a wrong impression of what he had realised in order to convince and satisfy fools, he preferred that they should leave his presence doubting his Buddhahood.

When asked about the existence or non-existence of a Buddha after Parinibbāna, the Exalted One replied: "After Parinibbāna the Tathāgata cannot be said to exist; neither does he not exist. Nor does He both exist and not exist nor does He neither exist nor not exist." This means that both existence and non-existence, and all entanglements of these associated ideas, are phenomenal, and therefore unreal, concepts. The point of the Buddha's Teaching is to do away with all such concepts: they are called "*dițțhi*"—"views" and as such have nothing to do with reality. The Buddha said, "I have no theories. I have reached the Further Shore."

3. The Rationale of Conduct

From this necessarily brief comparison of modern scientific
ideas and the Buddha's teachings of over two thousand years ago it will be seen how strikingly they dovetail and supplement one another.

The question then arises; how was it possible for the sages of that remote period to penetrate the illusion of material substance and find that it was composed of electronic forces, and to form so accurate an idea of the nature of the universe and its processes? The answer can only lie in accepting the belief that they were able to raise their consciousness beyond the sphere of the mundane, so that they were able to view phenomena from an entirely different angle of perception, through the practise of jhāna or meditation. They had no laboratory equipment, no microscopes or telescopes and no mathematical formulae to guide them; and when they had made their discovery they had no technical language by means of which to impart their findings to others. It would indeed have been hopeless for the Buddha to attempt a description of the nature of the universe as He had realised it, on these lines; no one of His time would have been capable of understanding Him. That is why He refused to answer questions concerning the origin of the world, or whether it is eternal or not eternal. Had He given an affirmative reply or a negative one to either question it would have been in a sense untrue. All such queries, being based on a false conception of existence, are wrongly framed, and are not capable of being answered by "yes" or "no". The Buddha's reply, in effect, was that questions of that kind are not conducive to release from

rebirth, but the implication always remained that the true answer could be gained by the seeker, through insight, although it could not be imparted to others. The iddhi, or so-called 'supernatural' powers gained by the arahats were simply the knowledge of the hidden laws of the universe and how to make use of them, but by the Buddha they were regarded as but another and greater obstacle to the quenching of desire and the attainment of liberation.

The law of causality is like an iceberg; only one-eighth of it or less is visible, the rest lies below the surface. We observe the effects while remaining ignorant of the causes. When we switch on the electric current the light appears; we know how to harness electric power, and we know that it exists because of its manifestation as light, but of its real nature we know nothing.

The scientist Max Planck, wrote: "What sense, then there is, it may be asked, in talking of definite causal relations in regard to cases where nobody in the world is capable of tracing their function? The answer to that question is simple: As has been said again and again the concept of causality is something transcendental—quite independent of the nature of the researches and it would be valid if there were no perceiving subject at all ... We must distinguish between the validity of the causal principle and the practicability of its application:" Even the scientist, therefore, has to admit causes beyond his comprehension, such causes existing in a realm that is distinct from the subjective realm of the investigator. Concerning this the Buddha declared: "Whether Buddhas arise or do not arise (to perceive and reveal the Truth) the law of causality, the principle of the dependence of this factor upon that, the causal sequence of events, remains a fixed and unalterable law."

"The concept of causality is something transcendental." This is a significant phrase indeed, coming from a scientist. It is precisely in this transcendental concept of the causal law that Buddhism establishes the moral principle of kamma. The materialist rejects the idea of God and Soul, and because he finds no evidence of a moral or other purpose in life, he repudiates all belief in the moral order of the universe as well. Buddhism also is independent of a theistic creator and of a soul or ego-principle, but Buddhism maintains the validity of the moral law. Likewise Buddhism admits the infinite multiplicity of worlds and the apparent insignificance, of man-yet man is the most significant of all beings, according to Buddhism; man is of more significance than the gods. Why is this? It is because the gods are merely enjoying temporarily the results of good actions performed in the past, but man contains within himself additional potentialities. He is the master of his own destiny; on the battlefield of his own mind he can conquer the ten thousand world-systems and put an end to samsāra, just as did the Buddha. But in order to do this he must understand the nature of kamma, the principle that governs his internal and external world.

In the 'Gradual Sayings' of the Buddha (Anguttara Nikāya)

it is said: "To believe that the cause of happiness or misery is God, Chance or Fate, leads to inaction." ^[2] Our spiritual evolution depends upon ourselves and ourselves alone. If there is any meaning behind the ethical laws, any exercise or freewill in the choice between good and evil, right and wrong, it stands to reason that there must be the possibility of developing or degenerating, of evolution or involution. If progress were a mechanical process with its outcome a foregone conclusion, there would be no point in any freedom of choice in a world of opposites. The law of kamma, or causal resultants, must work both ways, like a law of mathematics, otherwise it cannot be a universal law. We cannot, as some believe, have a law that works only one way and gives us the best results even though we choose the worst causes. Freedom of choice between right and wrong, between ignorance and knowledge, implies the highest degree of personal responsibility. Under the influence of materialism humanity is rapidly losing sight of spiritual values and is choosing the path of darkness and ignorance. What is needed today is a return to the wisdom of the past, which is also the highest wisdom of the future the wisdom that belongs to all ages and all the races of mankind. Without that there can be no lasting peace or certainty of progress for individuals or nations.

Buddhism teaches three essentials: to abandon all evil, to fulfil all good and to purify the mind. Its teaching is a doctrine of scientific principles based upon analysis, discrimination and reasoned investigation. Yet "good and

evil" and "right and wrong" are terms that do not rightly belong to Buddhism; we have the choice of kusala kamma (skilful action) and akusala kamma (unskillful action), the first denoting those actions which are pure and lead to good results, the second meaning actions performed under the influence of delusion and tainted with greed, hatred and ignorance, which lead to retrogression. When the materialist states that he finds no reason to believe that life is governed by any moral principle or that it has any ultimate purpose, but every reason for supposing that right and wrong good and evil, are merely inventions of the human mind, the Buddhist reply is that so far as purpose is concerned he is right. The process of samsāra has no purpose; it is "empty phenomena" without any ultimate meaning. But all the same it is controlled by the causal law, and that law is, transcendentally, an ethical law: The purpose of life is whatever we make it for ourselves, and its goal such as we define for ourselves, but all the time we are subject to moral law in every volitional action, mental or physical. The deep conviction which all men, even the least civilised, possess, that there is a universal distinction between what is called right and wrong, persists in the face of all apparent evidence to the contrary. Where does it come from? Can it be justified?

If it cannot be supported by reason, then life becomes nothing but 'a tale told by an idiot, full of sound and fury, signifying nothing'. Against that conclusion, all our instincts revolt. 'If reason cannot come to their aid the instincts dispense with reason, for the psychological fact is that we would far sooner abandon reason than lose our faith in absolute justice. And our instincts in that respect are right, though our reasoning be faulty. Drawn unwillingly into an argument on freewill versus predestination, Dr. Samuel Johnson roared, "We know we have freewill, and there's an end on it!" Most people feel the same way about moral values.

That actually is our starting-point, but it cannot be proffered as anything more than collateral proof. Since people are subject to delusion in so many other matters, the argument cannot stand on its own, but it is very strongly reinforced by (a) its universal existence among all types of men, in all stages of civilisation and historical epochs and (b) the fact that although the finer points of moral conduct may differ widely in different parts of the world and at different periods, the basic principles of morality are recognised everywhere and receive universal assent.

By 'basic principles', we are to understand, not the local and temporary standards that prevail from time to time, and which give place to others as modes of thought change, but certain fundamental rules that are found to be identical all over the world, and which provide the foundations on which society rests, by enabling people to live together in communities to their mutual advantage. Morality is not, for instance, a matter of clothing. The dress that is suitable for one climate, period or civilisation may be considered indecent in another; it is entirely a question of custom, not

in any way involving moral considerations, yet the artificialities of convention are continually being confused with principles that are valid and unchanging. It is strange that so much importance is attached to them when history shows that it is possible for a complete revolution in ideas to take place within so brief a period as one generation. Michelangelo depicted many of the characters, both angelic and human, in his Sistine Chapel frescoes completely nude. A subsequent Pope, outraged by their appearance, desecrated the artist's work by commissioning an inferior painter to add loin cloths to the male figures. Marriage customs equally have little bearing on essential morality. In a polygamous society, to have only one wife might quite reasonably be thought an outrage against the customs of one's fellows, and therefore 'immoral'. In Tibet, a girl who has had a child before marriage, instead of being disgraced and humiliated and properly ashamed of herself, as she is expected to be in Western society, is highly honoured and sought after in marriage because she has proved herself fertile. In many parts of feudal Europe it was at one time the custom for a newly-wed girl to spend the first night with the lord of the manor. Such customs are now considered barbarous, but at one time they represented the norm. Marriage between brother and sister was the rule for the Pharaohs, and the records of antiquity provide other instances of incestuous relationships that carried with them no particular moral condemnation. Among the warriors of Sparta and the ancient Samurai caste of Japan, homosexual

relationships which in Europe are severely punished by law, were not only permitted but actually encouraged, the reason being that heterosexual relationships were thought to have the effect of softening and effeminising the martial nature. It is abundantly clear, therefore, that all such local and temporary fashions in behaviour are governed by expediency and current beliefs; they represent the standard of conduct which is thought best for the welfare of a particular community at a particular time. Depending on circumstances and conditions, they are liable to change as these undergo alteration. Communities which are mainly pastoral and agricultural, or nomadic as in the case of the desert tribes of Arabia, tend to be polygamous, and any change in their customs is usually traceable to a change in their economic conditions or mode of livelihood. In the same way the sexual customs of the Spartans, quite apart from religious prejudices, are naturally frowned upon in a society that wishes, as most national groups at present do, to increase its population.

It has been the mistake of most systems of morality based upon religion to place too much emphasis on the nonessentials, with the result that, in the frequent phases of reaction against an artificial morality, such as the present generation's revolt against sexual restrictions, the really important rules are thrown aside likewise. Under Christianity, for instance, the very word 'morality' has come to mean almost exclusively sexual morality, so that it may be said of a man who is a confirmed thief, liar and swindler that, despite his failings he is a very moral man-meaning that he is faithful to the one wife the law allows him! The danger here lies in the fact that thoughtful people who are intelligent enough to realise that these rules are artificial and not based on any transcendental, universally-valid principles, are liable to fall into the error of thinking the same about all the other ethical laws. This is not to say that sexual rules of conduct have no importance; they have, but not in the sense that it is necessarily wrong to have more than one wife. It may be legally wrong in one country at one time, but it is not therefore wrong from the moral point of view, since a plurality of wives and concubines is sanctioned by highly moral people in other parts of the world: Mohammedanism permits a man four wives and the sexual enjoyment of those "his right hand possesses", i.e. his female slaves. It does not, however, permit him to commit adultery with the wife of another. Similarly, a prince in the time of the Buddha was given a retinue of concubines and dancing girls. Man is by nature a polygamous animal, and systems that permit a plurality of wives can with greater justice and realism punish severely any man who commits adultery with the wife of another, since he can have no possible excuse for his offence. Actually, adultery is rare among the polygamous sects for this very reason, whereas in the West it is all too common, and so has to be dealt with leniently.

We have already noted that the universe itself is amoral; it does not show any indication of being planned on what we should recognise as ethical principles. It knows nothing, apparently, of justice or mercy; still less is it concerned with sexual rules, except where these are connected with the preservation of species and their propagation, that is, their biological compatibility. A dog in its wild state will not try to mate with a cat because there is no biological affinity between their species, though I am informed on credible authority that under the artificial conditions produced by association with humans this is occasionally (but very rarely) attempted. But in quite normal circumstances a dog will certainly attempt sexual connection with another dog. The working of instinct in such a case is clear. Nature knows no such thing as 'unnatural vice'; it is only virtue that is 'unnatural'.

Buddhism does not claim that to live virtuously, in any sense, is to live in harmony or accordance with the laws of the universe. Quite the contrary. Nature is governed by the law of craving and self-gratification. The practise of sīla (morality) is counter to the laws of nature; it aims to nullify and destroy the conditions of saṃsāra which are inherently bad, and to open a way out of these conditions. It is the animal, ruled solely by the promptings of instinct and selfpreservation that lives according to the laws of nature. Seeing that the universe is not the work of a beneficent Creator the Buddhist is not surprised or dismayed by the discovery that it shows no signs of a moral law or purpose. Saṃsāra is the outcome of ignorance; why should it manifest any ethical principle? The materialist, in claiming

that moral laws are merely man-made, without any sanction either from nature or from supernatural sources, is right to a certain extent, but only Buddhism is able to show how this can be true, yet at the same time maintain the validity of the moral laws. The fact is that there is one kind of law for the world—the natural law which is completely amoral—but another law for getting outside the world and its conditions. This is the Dhamma sanantana, the "ancient law" that the Buddha referred to when He said, "Not by hating does hatred cease; by love alone hatred ceases. This is the ancient law." Not the law of nature, but the law discovered by those who made their escape from the evil conditions of nature, the Buddhas, Pacceka Buddhas and Arahats of the past. Buddhist morality is therefore on a stronger and more rational basis than any system of religious ethics which attempts to impose morality on man by pretending that moral laws are the laws of a Creator whose own work, the world, itself shows no evidence of morality. This point is vitally important, since it indicates at once the superior realism of Buddhist thought over the philosophy of the theistic systems, which are bound to ignore the contradictions of their doctrines that are to be found everywhere in nature. It establishes morality on an altogether higher and more invulnerable plane. The socalled 'problem of evil', the great stumbling-block of Christian theologians, does not exist in Buddhism; it was not necessary to invent a Garden of Eden and a mythical apple to account for the existence of 'original sin'. The man

who kills, steals, fornicates, lies and stupefies himself with drink is not going contrary to the 'laws of God' or of nature. He is following the laws of the world—that is, the essential conditions of saṃsāra, dominated and brought into being by craving—and he will continue to revolve in the miserable spheres of existence until his ignorance is dispelled and he realises that his egotistical sensory indulgences carry with them a tremendous burden of suffering.

This suffering is not the penalty of transgressing any law, but the natural consequence of following the law of ignorance instead of the higher law of wisdom. The law of nature is the law of ignorance; its bidding is: "Do whatever your lust and hatred prompts you to do; for this is your nature as it is the nature of the beasts. Look around you and you will find the whole world following this, the law of nature and of life. This is the way to remain in the kāmaloka, the realms of passion and sensual pleasure!" But the voice of higher wisdom tells us: "The law of the world is an evil law. Giving transitory and illusory pleasure through the indulgence of the senses, it claims payment in suffering. Look around you and you will see all sentient beings paying this price in gain and despair. They revolve ceaselessly in the miserable toils of samsāra, self-bound and selfcondemned. The law of samsāra is their own law, because they in their ignorance have created samsāra and the conditions of samsāra are the conditions of their own nature. Cease to follow the base of law of the world, the law of lust, hatred and delusion; destroy its power. Follow

instead the law that gives release from birth and death and brings all beings to Nibbāna, the Eternal and Unchanging, the Everlasting Bliss!

4. Rational Morality

What, then, can we regard as the basic, or universal and timeless principles of morality? They could not be better summed up than in the five precepts given by the Buddha for the guidance of laymen. It should be noted that these are precepts offered for guidance; they are not commandments.

Anyone is free to break them if he wishes or cannot help doing so, but the Buddhist understands that, in accordance with the law of kamma he breaks them at his own risk, and must inevitably pay the penalty for his indulgence.

The first precept is not to take the life of any sentient being. It bears a much wider meaning than the "Thou shalt not kill" of Christianity. The latter applies only to human beings; but Buddhism, more scientifically, places all life in the same category, and the Buddhist is expected to extend his compassion to every living being without distinction or reservation. All are enmeshed in saṃsāra and all are struggling upwards, evolving towards something higher. At the same time, all are suffering, and no one should willingly increase the sum of pain and distress in the world, or try to interrupt the working out of the kamma of another. Parallel with this runs the law which ordains that he who kills must himself be killed, having created that condition by the volitional impulse of his own thought and deed. "He who lives by the sword shall die by the sword" is a truism, but the Dhamma reinforces its authority by revealing the causal principle, mental in origin, which underlies it. This is the basis of Buddhist "harmlessness", the foundation of Mettā and Karuṇā. If only this one rule were observed throughout the world, wars, murders and violence would come to an end and the security of all peoples would be assured.

The second rule is not to take that which is not one's own by right. It is the equivalent of the Christian "Thou shalt not steal". Here again we have a basic principle in the sense that it is one without which no form of society could cohere. So far as the writer is aware, the Spartan community of ancient Greece was the only nation in history that did not condemn theft, but it was the law of Athens that finally prevailed. Theft is the result of greed, and is more harmful to the offender than to the victim.

The third precept is concerned with "wrong sensual indulgence" (*kāmesu micchācāra*). Though the Pali word *kāmesu* signifies excessive sensual indulgence of any kind, in this context it undoubtedly stands more explicitly for sexual licence. The question is: what precisely constitutes sexual licence from the Buddhist—that is from the universal point of view as opposed to mere customs dictated by time, place and circumstances?

To answer this question we have to consider sex, as it stands in relation to the primary defects of the human mind, $r\bar{a}ga$ (passion) and $tanh\bar{a}$ (craving). All sexual desires, whatever their nature are rooted in craving and passion; they are in fact the strongest and most difficult to eradicate of all their manifestations. Sex is one of the fundamental passions, common to all sentient beings in the human and animal worlds.

Buddhism shows that sexual passion is the chief enemy of spiritual progress, but it does not make any artificial distinctions, as does Western sexual morality, between different forms of sexual craving. All, from the Buddhist point of view, are harmful.

But it is not the Buddhist solution to the problem to suppress the instinct, and it is certainly not to be dealt with successfully by making arbitrary laws limiting the number of wives a man may have, or the number of husbands a woman may have, nor by unofficially approving one standard of morality for one sex and condemning it in the other, as is done in the West. Western repressive measures against sex have so far been successful only in one thing the production of more sex-maniacs.

Man is the only animal that does not have periods of natural sexual inactivity during which the body can recover its vitality, and unfortunately our present civilisation has laid so much emphasis on the erotic side of life by commercialising it, that the modern man is exposed to a ceaseless barrage of sexual stimulation from every side.

The Buddhist way of dealing with the problem is not legalistic, but therapeutic. Sexual craving, like any other craving, is to be eradicated not by suppression but by gradually removing its root. The practise of bhāvanā (meditation) directed towards the impurities of the body, the transience of all physical beauty and the painful nature of the passion that it engenders, is a form of mental treatment that weakens sexual attraction and in the end reorients the mind against sexual desire. It is a scientific process of cleansing the mind which is fully in accordance with natural psychological laws.

Regarding the sexual control to be practised by the ordinary layman, Buddhist tradition has a list of twenty classes of women to whom the observance of the precept applies. In summarising them, we may say that the items in the list comprise firstly abstention from adultery; that is, taking sexual pleasure from a woman who stands in the relation, even if only temporarily, of a wife to another man. Further included in the list is sexual relation with minors and all those under guardianship. To be added here are also all cases of compulsion: apart from rape in peace or war, also sexual relation with those who have to yield because of their economic dependence upon the person concerned, as in the case of servants, employees, etc.

The fourth precept dealing with abstention, from "wrong ways of speech" (*musāvāda*), means not only to abstain from

lying, but also from all forms of evil speech—abuse, slander, harsh and biassed criticism and anything, that can cause injury or distress to another.

Here again, compassion and benevolence are the keynotes to understanding the Buddhist rule. To abstain from wrong speech is to refrain from saying to or about anyone that which we should not wish said to or of ourselves. It means scrupulous honesty and adherence to truth, and something more—tolerance and kindness.

Fifthly, the Buddha enjoined His followers to abstain from drugs and intoxicants. Christianity has no such precept, but Buddhism requires full command of the mental faculties, an unclouded and penetrating intellect to pierce through the illusion of saṃsāra and find reality. The man whose mind is well-balanced and purified by understanding does not need to take refuge in liquor or drugs to dull a mental pain. Drunkenness is the outcome of a sense of frustration and futility. It takes hold of people who subconsciously realise themselves to be failures, even though they may be successful in a worldly sense. It is a refuge from worries and conflict (i.e. dukkha), but only a temporary and false refuge, heaping illusion on illusion, a fictitious gaiety erected on the bottomless abyss of despair. Its final result can never be anything but utter physical and moral disintegration.

If we examine these five simple principles of conduct objectively we find that they are sufficient in themselves to guide and regulate the daily life of man, in every age and every land. They have nothing to do with fashions of period or place or with arbitrary prohibitions. They can therefore claim to be basic and fundamental in the only real sense. They are moreover, sane and balanced in outlook and intention. They are not built on dogmas such as "Thou shalt have none other God but me . . . for I the Lord thy God am a jealous God", but on clear and explicit reason.

Behind each of the precepts there lies the unspoken but evident intention to overcome the craving engendered by egotism, which is the only real evil. In Buddhism, the meaning of good and evil takes a different form from that found in any other system of thought. Evil is simply anything which binds us to the delusion of self and keeps us revolving in the cycle of rebirth. It is self-delusion, craving, lust, hatred, avarice—all the āsavas, or impurities of the mind. Nothing else. The actions that arise from it are only the outward and visible manifestations of the real evil, which is a subjective quality existing as an essential characteristic of phenomenal individuality. It arises in the mind as the precursor of all such actions and their resultants: "Mind precedes all phenomena, mind is the chief, they are all mind-made" (Dhammapada, v. 1).

5. Mind and Matter

This brings us face to face with the most perplexing problem

of science and philosophy—the relationship of mind (or what in Buddhism is more aptly termed "psychic factors") and material substance. If we accept the theory of organic structures that mutate and develop over the generations, we must next ask ourselves whether there is any essential difference between organic matter, or matter which forms a part of a living organism, and so-called "dead" matter. The latter concept, however, is, already somewhat out-dated, since physics no longer takes a static view of the material universe.

Science makes no distinction today between organic and inorganic matter, and this view, correct as it undoubtedly is, has been interpreted in terms of materialism.

That this interpretation cannot be supported is proved by certain experiments, one of which is fairly well known. It is that of placing a subject under deep hypnosis and telling him that he is about to be branded with a hot iron. A pencil or some similar object is then placed on his skin, and a blister appears, together with all the accompanying symptoms of a severe burn. What happens in such a case is that the patient's mind is entirely under the dominance of suggestion and when it is fully convinced that a burn is about to be inflicted, by some process as yet unknown the message travels to the part of the body that is touched, and the flesh reacts exactly as though it had been in contact with a branding iron. In other words, the material substance reacts to the suggestion of the mind; it is completely dominated by, the preceding mental state. "Mano pubbangamā dhammā"—"Mind precedes all phenomena."

Again, an identical psycho-physical relationship is seen in the case of Christian mystics who exhibit the phenomena known as the "Stigmata", which are popularly ascribed to a miracle. The Stigmata are actual wounds in the hands and feet which sometimes appear on the bodies of Christian religious and ecstatics, reproducing the wounds inflicted on Jesus at the Crucifixion. Invariably they are found in deeply religious people who have experienced states of ecstasy or trance. These states are analogous to the hypnotic conditions but are self-induced. The mystic meditates on the Crucifixion of Jesus and identifies himself or herself (the subjects are frequently women) with the suffering victim until the experience becomes an actuality in the mind. Here intense faith and concentration take the place of hypnotic suggestion from outside, but the result is the same. The physical body obeys the conviction of the mind just as in the case of the subject who is persuaded that he is being branded with a hot iron, and the wounds duly appear. The devout believer hails a miracle, the materialistic sceptic scoffs at what he believes to be a fraud. Both are wrong, though the believer is nearer the truth than the sceptic. The secret of the phenomenon lies in the pre-eminence of the mind, the determining factor in all physical processes.

Science is now beginning to explore the unknown territory of the mind and serious attempts are being made to define the frontiers between mind and matter. Without guide or compass it is fatally easy to take a wrong path and arrive at hopelessly false conclusions in a science which is yet in its infancy. Enough has been established, however, to indicate that mind is not a product of inert matter or in the last analysis dominated by materialistic principles. The precise nature of the relation between the two may never be known, but from all we are able to observe it seems clear that matter is governed by laws that exist on an immaterial or psychic level. Our tendency to confuse the effect with the cause arises from the fact that the effect, which is material, is more apparent to our senses than is the non-material cause, It may well be that the Western scientist and philosopher encounters difficulties because he is looking for a frontier that is not there, or because he is looking for a relationship of opposite principles when he should be exploring a complex of interdependent factors.

Let us try to elucidate this from the Buddhist standpoint. In Buddhist philosophy a living being, of whatever order, is considered under two main heads, 'nāma' and '*rūpa*'. Nāma signifies mental factors, *rūpa* stands for the physical form, or, in an extended sense, any physical or material phenomena, or any event that occupies space, since every object, considered dynamically, consists of a series of events. This division, however, is the crude division pertaining to relative truth only. Actually the whole organism is only an aggregate of four primary attributes: āpo, vāyo, tejo and paṭhavī, or cohesion, extension, kinetic energy (temperature) and solidity, and these attributes or qualities are shared in varying combinations by all material substances both organic and inorganic. The psychic division consists of *vedanā* (sensation), *saññā* (perception), *saṅkhāra* (mental formations, e.g. volitions, reflective thoughts, etc.) and *viññāṇa* (consciousness). These groups (*khandhas*) are governed by the immaterial law of cause and effect which takes its pattern from the impulse of volitional action or kamma, which is actuated by craving. *Saṅkhāra* is perhaps the most difficult factor to define of the four mental *khandhas*, but it is precisely in this concept of *saṅkhāra* that the clue to the inter-relationship of mind and matter is to be found, for *saṅkhāra* stands for the whole aggregate of mental immaterial conformations, arising from past habits of thought and action that brings into momentary existence, and gives direction to, the phenomenal being or personality, including the physical form.

The four *mahābhūtas*, *āpo*, *tejo*, *vāyo* and *paṭhavī*, are not material elements in the crude European Mediaeval sense; they are rather immaterial qualities which manifest to the sense as material substance. Hence it is said that to form a single material atom all four of the *mahābhūtas* must be present; not one of them can exist independently of the others. The atom of physics is a unit of electronic energy, but in combination with other atoms it assumes the material form characterised by the four qualities, and it is as such that it becomes perceptible to the senses.

Scientific knowledge has led us out of the realm of what is called 'naive realism'—that is, the acceptance of the reality of material phenomena at their face value—into an insubstantial world that bears little resemblance to the external universe with which our senses make us familiar. In this abstract world of the physicist, matter becomes electronic energy in a continual state of flux, and what is to all appearances solid substance resolves itself into a complex of immaterial forces. This has caused scientific thinkers to question the validity of all knowledge which comes to us through the channels of our senses, because the knowledge of physics itself depends on empirical observation. To take a simple illustration; when we perceive colour and give it a name such as 'red' or 'green', we are not perceiving anything that has real existence as 'red' or 'green', we are merely giving a name to the sensation that arises in our consciousness when certain light waves impinge on the retina of the eye. These rays are not a property of the substance which we then describe as being 'red' or 'green'; they are in fact only the rays which are not absorbed by that substance but are reflected back from its surface. In other words, there is no essential quality of 'redness' or 'greenness', but only a subjective sensation caused by neural and cerebral activity set in motion by the light waves entering the eye. This process of cognition: through the cakkhudvāra (eye-door) is similar to that experienced through each of the other sense-channels, a process which is fully analysed in Abhidhamma philosophy: it leads inevitably to the conclusion that the world of our sense perceptions is a subjective world fabricated from a merely relative reality and that the

dynamic world of physics bears hardly any relationship to that which we cognise by means of sight, hearing, smell, taste and touch. The mind (*mano*), which Buddhism classifies as a sixth sense, correlates the data obtained through the senses and is thus caught up in its own illusory constructions, but these constructions, manifesting as material objects and events in time and space, are determined by the preceding mental dispositions or, *saṅkhāra*. To understand *saṅkhāra* as a factor of personality it is necessary to go more fully into the doctrine of kamma, but before doing so it may be mentioned that the identification of *saṅkhāra* and kamma is so close that kamma frequently appears as a synonym for *saṅkhāra* in the Buddhist chain of Dependent Origination (*pațiccasamuppāda*). ^[3]

6. The Causal Origination of Mind-Body

Paticca-samuppāda, ^[4] the chain or cycle of causality, consists of twelve *nidānas* (links), and in Buddhist philosophy it embraces the whole process of the arising of a sentient being, from life to life and from moment to moment of consciousness, in the following formula:

from avijjā (ignorance) arises sankhāra;

from *sankhāra* (here, in the sense of karmic volitions) arises *viñnāna;*

from viññāņa (consciousness) arises nāma-rūpa;

from *nāma-rūpa* (psychic aggregates and physical aggregate, or roughly mind and form) arises *saļāyatana*;

from *saļāyatana* (the field of six-fold sense perception) arises *phassa;*

from *phassa* (contact between the organ of sense and the sense-object) arises *vedanā*;

from vedanā (sensation) arises taņhā;

from tanhā (craving) arises upādāna;

from upādāna (grasping attachment) arises bhava;

from *bhava* (the process of becoming, or life continuum) arises *jati*;

from *jāti* (birth—or, in another sense, momentary coming into existence) *jarā-maraṇa, soka, parideva, dukkha, domanass' upāyāsa,*—old age and death, grief, sorrow, lamentation and despair arise.

For the proper understanding of this causal nexus it must be viewed in different ways according to the particular aspect to be considered; sometimes as a whole, and sometimes split up into its component parts. For our present purpose a triune division is necessary, the first two links to be taken as representing the agglomerate of past phases of experience from previous births; the following eight (from *viññāṇa* to *bhava*) covering the contemporary existence and the final two, *jāti* and *jarā-maraṇa* with its resultants, as presenting a

comprehensive survey of the conditions to be expected in the future. At the same time it must be remembered that the entire process is taking place momentarily and continuously, and that each of the *nidānas*, to whatever section we have arbitrarily assigned it for our immediate purpose, may be considered equally present in each of the others. Thus jāti and jarā-maraņa, present in the continuous process of arising and decay in the future, were also present in the past and are active in the contemporary middle section. The same is true of *avijjā* and *saṅkhāra*. In one sense, paticca samuppāda represents cause and effect operating in three connected life-sequences, while in another it stands for the same causal process which is going on from moment to moment throughout a single life-span. A stricter analysis of the meaning of the technical Pali terms is necessary in order to appreciate this. Buddhism views the process of arising and passing away as one continuous stream, in which birth and death follow upon one another with the arising and passing away of each momentary unit of consciousness.

For our present purpose we have to take the triune division as our basis for understanding the law of kamma; that is to say, the grouping into past, present and future existences. Here we find the first two links bracketed under what is called *"atīta kamma bhava"*, or past causal continuum. This represents the aggregate of activities performed under the influence of ignorance in the past, which must bear resultants in the same life, the present or the future lives. These resultants when they fructify are known as

"paccuppanna vipāka bhava" or present resultant continuum, and they condition the links of the middle section from viññāņa to vedanā (five links). In effect this means that consciousness, mind-body, sense-organs, contact and sensation in the present take their arising and their particular form from the willed causal actions of the past. If these were good, the links springing from them must be good; if the actions were bad, the resultants must be of an inferior kind. Hence the inherent differences, physical and mental, between different beings, and the varying conditions of sickness or health, riches or poverty, in which they find themselves. This is governed by a law which is as impersonal and mechanical as the laws of physics. But although present conditions are thus predetermined by past actions, the Buddhist view is not fatalistic. While the circumstances confronting us in the present were predetermined by ourselves, our reaction to them is not predetermined. The remaining links of the middle section, from *tanhā* to *bhava* are under the control of our will; hence they are grouped under the heading of "paccuppanna kamma bhava", which means present causal continuum and is the counterpart of the "atīta kamma bhava" of the first section. It is as free volitional action (kamma) that the causal process can be given a new direction. It can even be brought to an end. This section, it will be observed, begins with tanhā (craving), as the first section begins with *avijjā* (ignorance). Because these two are in a sense complementary, both stand at the forefront of their respective sections, and because

both sections represent the sphere of willed action, it is possible to extirpate them, and in extirpating craving, ignorance is also overcome. This is the purpose and object of the Noble Eightfold Path, with its final goal, Nibbāna.

The incompatibility between a mechanistically-determined universe and one in which free will is possible is resolved in Buddhism in much the same way that it has been dealt with by science. So far as we have been able to see hitherto the causal law has been absolute, and all enquiry outside the realm of conditionality must still be referred to a different dimension of experience. But the rigid determinism of science has given way under the impact of quantum physics, and we now know that the causal law which operates predictably for large quantities does not necessarily govern the activities of any specified unit. No law has been so far discovered that is equally valid statistically and individually. That this leaves an opening for the admission of free-will has been hotly contested by some scientific philosophers who prefer to cling to the concept of a rigidly mechanistic universe, but that concept no longer holds its former authoritative position. In the sphere of human action we must acknowledge that choice is severely circumscribed—by conditions, situations, environment, heredity, individual psychology and other factors—yet despite this, man shows a quality that differs very greatly from the conditioned reflexes of Pavlov's dogs. He is not solely a piece of mechanism, reacting uniformly and predictably to the nerve-stimuli set up by sensecontacts and associations: A man, confronted by the choice between a good action and a bad one, may have a very strong predisposition in favour of the bad action, due to habit formation kamma, but he can overcome it. He can mitigate his craving and ignorance, taming them to actions that are profitable and useful to society; or, as we have seen, he can if he will, put an end to them altogether and attain the extinction of suffering.

For purposes of, exposition, however, we shall assume that the process of existence (bhava) continues, that the present life we have been considering is followed by a rebirth. There is no 'soul' that passes on, linking one life to another, it is not even consciousness (viññāņa), as is sometimes erroneously supposed. Consciousness arises and passes away momentarily and must not, as the Buddha expressly demonstrated to His disciple Sati, be confused with 'soul'. What passes on is merely the causal continuity of actions and results, so that the final group of links, jāti and jarāmarana etc., fall into the category of "anāgata vipāka bhava"; that is to say, future resultant continuum, or the consequences of the paccuppanna kamma bhava of the present life section. This anāgata vipāka, again, corresponds to the "paccuppanna vipāka bhava" of the middle section, so that in the complete *paticca samuppāda* we have two sets of *kamma* bhava; past and present, and two of vipāka bhava, present and future. In other words, two sets of potential causes and two sets of resultants, balancing one another. And these two continue to operate reciprocally and in sequence until such

time as the volitional action takes a new line and is directed towards extinguishing craving (*tanhā*) and eliminating ignorance (*avijjā*).

"Anāgata vipāka bhava" signifies destination—the future state to which the present actions tend. This can be any one of the thirty-one abodes. As there is no 'soul' there is no question of a man's spirit or personality transmigrating into the body of an animal: The phenomenal personality is merely the manifestation of kamma, nothing more, so that an animal may be reborn as the result of a man's deeds performed under the influence of greed, hatred and delusion; which is a totally different concept from that of transmigration. It may be said that a man has been reborn as an animal or as a deity, but this is only using the word in a conventional sense, a fresh nāma-rūpa has come into being, bearing a causal relationship to the former being in exactly the same way that an old man bears a causal relationship to the child from which he developed. Conventionally, the old man bears the same name as the child, but his nāma-rūpa, that ever rolling river of Heraclitus; is not the same in any single respect."

It has already been stressed that Buddhism makes no false and unscientific distinction between the various forms of life; they are all embodiments of kamma, the mental ($n\bar{a}ma$) and physical ($r\bar{u}pa$) alike being the direct result of the previous volitional actions. In the case of the lower forms of life, where there is no moral consciousness and hence no possibility of the exercise of free will in choice between right

and wrong action, all actions are more or less strictly conditioned by prior determinants. They are of the nature of the 'conditioned reflexes' investigated by Pavlov. This means that in such states it is only possible to work out the results of past kamma, which is bound to be predominantly of a bad type. When this is exhausted, rebirth in another sphere of existence, higher or lower, takes place as the result of some residual good kamma left in abeyance from the time when volitional actions were being performed (katattākamma). It must be understood that all human beings, under the influence of ignorance, craving and delusion, are continually alternating between right and wrong action, each of which must have its result, so that a man who has performed many outstandingly good deeds, although as the result of some particularly bad action he may be reborn for a time in an inferior state, must eventually reap the good results of his meritorious actions, when he again has an opportunity of exercising his human right of free will. To be reborn as a human being having sunk to a lower level is extremely difficult because of the lack of opportunity and ability to perform the necessary good actions, and it may take aeons to accomplish, but the timescale dealt with by Buddhism is that of infinity, and nothing is final until release is gained. ^[5]

7. Kamma: The Universal Principle

The universe is a complicated yet entirely consistent whole, and we ourselves are a part of its mechanism. We cannot dissociate ourselves from the natural process which brings into being and destroys the physical objects around us. They all follow the law of cause and effect, or, to express it more correctly, an intricate pattern of conditionality, a pattern which is universal and all pervasive.

It is the same law which has determined the structure of the atom, and the structure of the atom in its turn has determined the character of material forms from the smallest grain of dust to the colossal planetary systems scattered throughout space. Yet an increasing knowledge of atomic structures has not enabled science to fathom the precise nature of matter or break down the secret of cellular growth or any other characteristic of vital organisms.

According to old systems of belief, man is a being distinct and separate from the rest of nature; distinguished both in origin and in destiny from all other forms of existence, organic and inorganic. He was thought to be unlike the mineral substances, unlike plant life, unlike the insects and unlike animals, because he possessed an immortal soul or some similar imperishable essence, not clearly defined, which other creatures lacked. Modern thought, as we have seen, finds no support for such a belief in science or biology. Human beings come into existence because of the same fundamental laws that give rise to other things in the universe, both animate and inanimate. Any distinction that we make between man and the other species on this planet must be purely a distinction based on differences in qualities, not in essential nature or substance.

What then is the law that underlies the arising of all phenomena? Science encourages the belief that its nature may be known to us through the process of cause and effect; that action and reaction are equal and opposite is a scientific axiom. In Buddhism, kamma means action, something performed, and in the moral sense it also implies reaction (vipāka), because every cause must produce a result, unless it is inhibited by some other factor of the same type but opposite tendency. That result must be of a like nature to the action that preceded it. If we could trace back the line of causation to the very beginning of this present universe we could not arrive at any first cause. We should discover, on the contrary, that the first atomic particles from which the universe took shape were merely the remains of a previous system that resembled the present one, and so back into unimaginable recessions of time and forward into infinite futurity. "Beginningless is this process of samsāra; the origin of beings revolving in samsāra, being cloaked by ignorance is not discoverable." This indicates a state of things which we can only imagine by resorting to analogy; it is altogether beyond the compass of the intellect. But so also are some of the concepts of science. Our minds are bounded by forms and relationships, the qualitative content of the space-time dimension, but this does not mean that other dimensions do not exist. When Einstein carried mathematical speculation into the nature of physics further

than it had ever been carried before, he came upon certain laws that proved the existence of another dimension beyond the three dimensions of Euclidean geometry. It is referred to as the fourth dimension, but there is no mind that can formulate any mental picture of it. Whereas we have the evidence of our senses and experience to give us knowledge of length, breadth and depth, for this other dimension we have no data whatever to build upon. It is a thing that exists simply as an abstract concept and can be expressed only as a mathematical formula.

Philosophically, it leads us to a paradox, for we have to work on the assumption that space is curved, that the entire space-time complex is a closed circle in every direction. To the ordinary mind this means nothing, for to understand the nature of the space-time complex we should have to know what lies beyond it; we should have to get outside it in order to look at it in relation to something else. As it is, our minds operate within the structure and are bounded by ithence our mathematics, like our systems of philosophy and metaphysics, can never lead us to any first cause or final destination. Our ideas, if we project them far enough and pursue them logically enough, inevitably bring us back to the point from which we started. We travel round the circumference of the circle or round the sphere in every direction, like a ship circumnavigating the globe, and all we discover at the end is a paradox, a seeming contradiction in terms of the "fourth dimension" of Einstein and the Nibbāna of Buddhism, both alike incomprehensible to the

normal consciousness. But the fourth dimension, although it is something that exists only as figures on paper so far as we are concerned, is essential to modern physics; calculations in the higher sphere of mathematics cannot proceed without it. The fourth dimension is something which, while incomprehensible itself, yet makes the rest of mathematics understandable and gives reason and cohesion to the laws that govern the other three dimensions known to us.

So it is with Nibbana. To understand Nibbana we have to break through the closed circle of concepts and associations. These phenomena are all characterised by impermanence, suffering and voidness of self and substance they have a causal genesis, a beginning and an end, without possessing intrinsically any of the characteristics with which our senseperceptions invest them. Nibbana, on the other hand, is the ultimate 'dimension' that lies beyond thought and altogether beyond worldly or even cosmic experience. Like the fourth dimension of Einstein, its reality has to be accepted, for the very reason that it alone gives meaning to all the rest. What science tells us of the fourth dimension was said by the Buddha about Nibbāna. "If there was not this unconditioned beginningless, endless, unchanging state there could be no way out from the states that are conditioned, subject to beginning and cessation and involved in ceaseless change." But while the fourth dimension can never be brought into the perspective of ordinary experience, but must forever remain a mathematical enigma, Nibbāna can become a living reality

because it can be experienced here and now, in this present world, in this earthly existence. There is a way out of the closed circle or sphere, and the Buddha has shown the way. If we visualise the sphere as being bounded by the impurities (*kilesa*) that arise in the mind through attachment to sense-objects it becomes clear that to escape from it we must first destroy these impurities. In the centre of the sphere, right at its heart, lies the fundamental delusion, sakkāya diṭṭhi—the belief in self or attā. Everything else revolves around that central point; so long as we are attached to the basic immemorial error of self-delusion, there can be no breaking through to the unconditioned pure state beyond the sphere of saṃsāra.

Everyone has seen a goat tethered to a stake in the ground. The goat moves round and round the stake eating the grass in a circle that extends as far as its rope will allow. The mind is exactly like that. It feeds in the pasturage (*gocara*) of the senses, and all the time its range is limited to the circle, while the stake to which it is fastened represents the idea of Selfhood, which keeps it from freedom. If we are to break away from the circle of conceptual thinking we must first of all recognise that the self around which it all centres is a delusion; once this truth is fully realised the realm of senseobjects and enjoyments can no longer imprison us. In terms of the cycle of dependent origination, if ignorance is abolished, volitional action and all the subsequent links, down to rebirth and death with their attendant miseries, come to an end. Thus it is not that there is any wall around
us separating us from the reality; we are bound from within, and it is to the realm of consciousness within ourselves that we must turn in order to uproot the stake that binds us.

But it is with the principle of kamma that we are concerned at present, because while we are still within this wheel of samsāra we are subject to its law. It is necessary that we should understand that law so that we may use the knowledge to our benefit instead of being its blind, ignorant slaves. The working of kamma and vipāka is impartial, it does not favour one above another, but when we realise it as being the one law that governs all our existence we realise also that through it we are the masters of our own destiny. The action we perform so unthinkingly today is a part of what we shall be in the future, for our aggregates of *nāma* and *rūpa*, our mental and physical characteristics, which, being in a perpetual state of flux are only tendencies, -were formed in the past, while, from moment to moment our present activities of mind, speech and bodily action are determining our future.

Western critics of Buddhism sometimes raise objections to the principle of kamma on the lines of the following quotation, which is taken from an article by a European who studied Buddhism but failed completely to grasp the important point which has been emphasised at the beginning of this work. He writes: "The justice of the law of karma is acceptable only if we take a superficial and theoretical view of life, but not when we examine more carefully the actual web and woof of human lives. Let us take the case of a cripple child born to parents in abject poverty. He does not remember his past life so he cannot be expected to appreciate that be is merely paying the penalty for former misdeeds. He will not in any way benefit from such a crude form of punishment but, on the contrary, will probably grow up with criminal tendencies and a grudge against society. Karma cannot save him."

Such objections are the result of a view that is animistic and artificial, a view that is essentially emotional rather than scientific. It is an attempt to find human motives and a human purposiveness in what has been shown to be an impersonal, amoral mechanism. It is not the function of the law of kamma to "save" or to "punish" anyone; its function is to maintain the process of samsāra, just as the function of the law of gravity is to make life on earth possible. Its results are only "good" or "bad" as we interpret them from our human standpoint. The law of gravity is not concerned because a man falls from a high building and breaks his neck. The law of cause and effect is not operated by any external agency with the object of "teaching" human beings. Man has to find his release, by struggling against it. The theistic idea, together with man's projection of his own personality and values into a scheme which has no place for them, is the root cause of all such confused theorising. Emotional thinking destroys objectivity: it is bound to be personalised and to evaluate everything according to personal standards of what is good for "me" or bad for "me". Buddhism requires a scientific objectivity of outlook,

a faculty for seeing things as they are without emotional reactions or any tendency to indulge in emotional interpretations. It is not possible to understand Buddhism while retaining the outlook on life of a sentimental spinster.

It cannot be too often repeated that there is no being, no continuous entity linking together our moments of conscious life, but there is a continuum of cause and effect, or the current of our becoming which is like a river, never the same from one moment to another yet all the time following a pattern that gives it visible form and makes it appear to be a continuous entity. Buddhism teaches a dynamic concept of consciousness, and hence of personality, which is a phenomenon momentarily arising and passing away. There is nothing in it that can survive the fleeting moment, nothing that can endure; its nature is *anicca*, impermanence, and *anattā*, the absence of any real core of personal self.

A living being, made up of Five Aggregates of grasping (*upādāna-khandha*) is therefore simply the manifestation of kamma and vipāka; he or it is the living embodiment of past actions. The five *khandhas* are *rūpa-khandha*, *vedanā-khandha*, *saññā-khandha*, *saṅkhāra-khandha* and *viññāṇa-khandha*, some of which have already been dealt with loosely under paṭiccasamuppāda. They mean respectively physical substance and attributes, sensations, perception, the mental formations (fifty in number), and consciousness. Of these, the one that forms the subject of our immediate attention is *saṅkhāra-khandha*, the fifty mental tendencies, for this is the

result of the predominant or most frequently recurring kamma of the past.

When a certain action is performed, a tendency is set up to repeat that action; when it is repeated over a number of times the tendency grows stronger. This is what is called habit-formation and is found to some degree even in inanimate objects, the most familiar example being a piece of paper that has been rolled. When it is unrolled and released again it rolls up once more, although there is no force causing it to re-roll except the fact that it had been rolled previously and certain minute alterations in its structure had taken place accordingly. Thus it can be seen that habit formation has its counterpart in a physical or "natural" law, and operates even where volition is absent or is represented by a volitional action from outside. In the lower forms of life, where volition, or will power, is only very slightly manifested, its working is even more clearly seen than in human beings. A fly settles on a particular spot on your arm. You brush it away and it makes one or two circles in the air, then comes to rest once more on precisely the same spot as before. This experiment may be made several times in succession with the same result. Every time the fly will descend on the same place on your arm, even though there is nothing special there to attract it, until something happens to break the chain of habit-formation which its first act set in motion.

Much the same mechanical pattern of behaviourism can be observed in the habits of fowls: If the hen roost in which they are accustomed to sleep is removed to a different place, at roosting time the fowls will go to the same spot where the hen-roost formerly stood, and for several nights they have to be guided into the shelter in its new location, until a fresh habit-pattern is established.

Such is the tremendous force of a habit which has become confirmed by the repetition of particular action. The only thing that can break it is a strong act of will, or the arising of a different set of circumstances which make it impossible to continue on the same lines. Every action that we perform, therefore, is potentially the father of a long line of actions of a similar kind. When the planets emerged from the fiery nebulae they continued revolving in space, not because there is any mechanism to keep them going, but simply because there is nothing to stop them. The initial impulse carries on requiring nothing more to maintain it, and it will continue until it is exhausted. Motion, and the thing moving, are merely a series of events in time and space, and this is the law governing the psychic tendencies-the principle of an action or an event producing a like action or event, the second producing a third and so on in unbroken sequence.

The Buddhist philosophy of dependent origination must now be considered as a whole, rather than interpreted according to the sequence of its parts. It begins, as we have already seen, with ignorance (or nescience—"not knowing"), which is a condition of the mind. Because of ignorance the mind functions imperfectly, accepting phenomenal appearances for reality, unaware of their true nature which is impermanence, disease and dissatisfaction and lack of essential reality. This condition is dispelled by realising the three characteristics of the phenomenal world and gaining knowledge of the Four Noble Truths, i.e., the fact of suffering, its cause, its cessation and the way to its cessation. Until that point of insight is reached, ignorance is present at every stage of existence; it is like an invisible cage which keeps the mind trapped in its own illusory constructions. Another name for this condition is *vipallāsa*, meaning distortion. It is of three kinds: saññā-vipallāsa (distortion of perception), citta-vipallāsa (distortion of mind or thought); and ditthi-vipallāsa (distortion of views). Each of the three kinds of distortion has four modes; that is to say, perceiving, thinking or believing that which is impermanent to be permanent, that which is painful to be happiness, that which is without self or soul as having selfhood and reality and that which is impure as being pure. The delusion of a permanent self and of the reality of material things leads to attachment to an external that has no noumenal reality, and under the influence of this craving the impurities of consciousness (āsavas) come into being; that is, kāma āsava, sensual craving, bhava āsava, lust of life, ditthi āsava, speculative opinion and *avijjā āsava*, the impurity of ignorance. The word 'āsava' literally means an influx of tainted concepts. The mind being self-tainted from various sources is governed by *lobha*, *dosa* and *moha*, the unholy trinity of greed, hatred and delusion, and these

characteristics give rise to evil actions producing bad *vipāka* (resultants) through repeated births. The central fact of Buddhist teaching as it concerns this present world is the actuality of rebirth and the operation of a moral law which conditions and dominates material phenomena.

From this it may be seen that Buddhism disposes of the materialistic fallacy, not by denying the data of experience, but by going beyond it. The material universe is not a delusion, neither is it a fixed and self-existing reality. It is to be viewed as it truly is—an aggregate of composite factors existing in relation to a certain imperfect sphere of consciousness; in short, a "relative reality" or conventional truth. For example, any material object may be regarded from different levels, and known or experienced according to those levels. First we have the level of ordinary cognition, which the materialist takes for the reality. On this plane the object is a solid body occupying three-dimensional space. We are aware of its existence through the channels of our senses and to them it appears to be endowed with shape, solidity, colour and other qualities. On the next higher level to this, the "solid object" is seen as a collocation of apparently material atoms, a miniature planetary system but consisting mostly of space. Viewing it thus, we are still not out of the material sphere; the atoms are the seemingly solid particles, like billiard balls, of Dalton's physics. Above this level it is seen to take the form of immaterial forces, and the electronic energy which is the basis of its atomic structure becomes apparent. The infinitesimal billiard balls

disappear, resolved into the energy which is the sole reality of present day physics. The next higher viewpoint, that which is accessible to the contemplative seer who has gained insight into the truth of *anicca*, *dukkha* and *anattā*, discloses the *dhammatā* or underlying law of the whole process, wherein its true nature is revealed and it is known to be constantly subject to change, perpetually in a state of unbalance and restlessness, and absolutely unsubstantial. The *dhammatā* is the law of being which, while itself invisible makes all its results visible. The ultimate stage of insight is above this, it reaches the void wherein even the *dhammatā* of the object ceases to exist and all relativities are wiped out. To exist means to function; in any dynamic concept such as that held by Buddhism and science the two terms are interchangeable.

Properly understood, Buddhism provides the one acceptable explanation of the arising of material phenomena from a mental base, and how it comes about that the mind can control, shape and evolve material forms to suit its needs. It also explains how it comes about that the effect of a strong mental supposition can, under favourable circumstances, produce an immediate reaction in the physical body. Everywhere the dominance of the mind (which most scientists are now agreed is not to be identified with the physical brain) over material substance reveals this most important side of their interrelationship. The Hindu Yogi in a state of religious ecstasy can walk on burning coal without injury, because intense faith has convinced his mind that he will not be burned, whereas the hypnotised subject of our earlier experiment is burned by the harmless touch of a pencil. The fact that this law works both ways, and that the physical can also influence the mental, as in the case of disease or injury impairing the psychic faculties, shows, not that mind arises from matter, as materialism, would have it, but simply that there is no 'soul' or selfentity independent of the five khandha process, which is a closely correlated, dynamic psycho-physical structure. One of the earliest sermons of Buddha, the Anattalakkhana Sutta, deals with this point exhaustively. The "being," complete with form, identity and personality, is a purely momentary resultant of past causes and the potential of future ones. He may be called the material manifestation of kamma, but kamma itself represents a law which is above the material. It corresponds to the *dhammatā* or immaterial law that underlies all material phenomena.

Despite the widespread belief voiced by the writer quoted previously, it is a fact that many people, at least in early childhood, do remember their former lives, sometimes in great detail, and cases have been known where the evidence has been confirmed beyond all question of doubt. The point then arises as to how, since at death the old aggregates disappear and fresh ones come into existence with rebirth, is it possible for anyone to remember anything relating to the previous aggregates? Memory is a function of the brain cells, and at rebirth the physical brain, which is part of the material aggregates, is a new organ. Does this not mean that there must be some kind of a "soul" that transmigrates and takes up its abode in the new body, carrying its memories with it?

There is no such "soul". What happens in these cases is that the memory is carried forward by the causal impulse stamping the new brain structure with a pattern similar in some respects to that of the old. In paticca-samuppāda the life-continuum is represented by *bhava*; it is this which conveys the previous impressions in conjunction with the sankhāra group. It will be remembered that avijjā, sankhāra and viññāņa constitute the first group of links, with viññāņa in its function of patisandhi (connecting) consciousness bridging over to nāma-rūpa, at which point the new body and mind appears and the next birth-group of links begins. Similarly, at the end of the middle birth-group comes *bhava*, the life-continuum, bridging over to *jāti* which stands for the future birth. Here the relationship in place between bhava and the two links sankhāra and viññāna shows how these three function in concord to project certain characteristics from one life to another. In actual practise, what happens is this: Pre-natal memory is almost always that of the life immediately preceding; it is usually the result of a very strong impression coming close to end of the life, or even dominating the final moment of consciousness; the deathproximate kamma which has the greatest influence in determining the next existence, and it is often of an intensely emotional nature-the kind of impression that is most powerful, in affecting thought-patterns at any stage of

life. At the rebirth, this powerful impression stamps its pattern on the cell structure of the new brain, and so the fresh *nāma-rūpa* inherits, together with accumulated tendencies of the *saṅkhāra-khandha*, certain memories belonging to the old. It is an operation analogous to the process whereby a mental conviction that the body is going to be branded produces a burn on the flesh, without any heat having touched it. The mental activity comes before the physical organ and determines its conformations. In Buddhist Abhidhamma, *bhavaṅgasota* corresponds to the unconscious-mind current or "subconscious mind" of modern psychology.

In this way Buddhism avoids the two extremes of idealism and materialism. While it teaches that as a man thinks, so he becomes, it does not attempt to dismiss the material world as a dream and a mirage. The multiple material universe exists, but only on the mental plane of ignorance $(avijj\bar{a})$. Its space-time dimensions, ignorance and sequences are homogeneous within the framework of their own logic, but that logic itself can only be understood by reference to a higher principle that is not in any sense supernatural or contrary to mundane knowledge and purposes, but which on a spiritual level reconciles the data of sensory experience with the intuitively-perceived moral law. With this knowledge it becomes possible to trace the harmonious pattern of cause and effect through all phases of sentient and insentient existence.

Sakkāya-diṭṭhi, the belief that the self alone is real, and that

it is unaffected by circumstances or actions, is a delusion of idealism that leads inevitably to the rejection of moral values. Materialism on the other hand, leads to the same result by denying the existence of immaterial ethical categories; for this reason it was denounced by Buddha. The mind that is enmeshed in materialistic delusions can never relinquish craving. It takes the impermanent to be lasting, and tries to find happiness in things that are perishable. At the same time it gives birth to impure states of consciousness, unaware that these and the evil action resulting from them produce misery without end. This, indeed, is the grossest form of ignorance, for even without any knowledge of the law of kamma it is plain for all to see that true and enduring happiness can never come from the pursuit and grasping of material pleasures. Emancipated from ignorance the mind views all things and sensations impartially, without clinging to any-this alone is the true secret of mental equilibrium and the stability that constitutes the greatest happiness in this world or any other plane of existence.

For many centuries these truths have been uttered, so that they have come to sound commonplace. They are the clichés of philosophy. But it is only Buddhism which is capable of bringing them into line with the facts of every day experience and the discoveries of science, and thus infusing into them new life and meaning. The Teaching of the Buddha does not deny any scientific fact, or even such evidence as that to which the materialist points as being contrary to religious belief. These materialistic facts are true —but they are not all the truth. Buddhism comprehends them and passes beyond them.

The Origin of Life [6]

No matter what might be said against the age we live in, no one could deny that it is an exciting one. Perhaps never before in history has there been so much to stimulate the imagination with vistas of new knowledge, fresh discovery and penetration into the unknown. It is as though the sealed book of the universe had suddenly, in a few short years, been broken open and its pages were being turned over rapidly before our eyes.

Who could have guessed, fifty years ago, that we should now be on the verge of sending the first explorers to the moon? Or that already travel into even deeper regions of space, beyond our solar system, was being seriously contemplated? The practical difficulties are being solved one by one. Even now, space travel on a large scale is theoretically possible.

Leaving aside space exploration, and confining ourselves to the surface of the earth, there are prospects of thrilling discovery just round the corner. Bio-chemistry is almost, it would seem, on the point of revealing the nature of life itself —that is to say, of finding out just how it came about that inert matter became transformed into living organisms. The mystery that has baffled mankind for thousands of years may not perhaps remain a mystery very much longer. Scientists have succeeded in isolating the most rudimentary forms of life, in the shape of micro-organisms that lie on the borderline between organic and inorganic matter, and all that remains to be done is to find out exactly what chemical or nuclear changes take place to effect the transformation. It has been claimed already that experiments have resulted in artificially producing cells which display the chief characteristic of living matter, the ability to grow, out of non-living substances.

To thoughtful people this is a far more striking and significant advance in knowledge than any connected with the conquest of space. Direct observation of different forms and stages of life on other planets might give opportunities for empirical study such as we do not have on earth, where life in its various forms is well established and fixed in definite patterns, but it will still be a long time before such observations at close quarters can be made, and there is no need to wait. It may be that we can reproduce the beginnings of evolution with the materials to hand. The experiments that are being carried out in our laboratories at the present time give us plenty to think about.

In the first place, we already know enough to have exploded, once for all, a myth that has dominated religious thought in the West for centuries. That is, the belief that life is a supernatural faculty divinely bestowed, and that man is a special creation. It was always taken for granted, even after Darwin, that living creatures owed their existence to a Creator, a higher being who fashioned them and infused them with the vital principle. Most people saw no other way in which, at least originally, it could have come about. It was the chief argument for the reality of God; he was thought to be necessary on account of his function as creator. Man, it was argued, might be able to make tables and chairs, jet-propelled aircraft and even television apparatus, but he could not make a living being—not even a worm. That was a thing which only God could do. Therefore God must exist. It was as simple as that—at least in the popular mind, though Christian theologians always felt it necessary to search for other reasons as well.

What has finally done away with this idea is the knowledge we now have that life arises as the consequence of certain natural processes, beginning with properties already inherent in the cosmos. To prove it, scientists are trying to reproduce the right conditions by which these processes are brought into operation, and by all accounts they seem to be meeting with success.

But before we go any further, it is essential to get one thing straight. In what they are doing, the scientists are not creating life. They are merely bringing about, artificially, the situations in which, all the factors being present, living organisms inevitably come into being. The distinction is an important one, as I propose to show. What the experiments have confirmed so far is our dawning realisation that there is nothing supernatural about the arising of living creatures. They are not created out of nothing by divine command. They are the result of nature's chemistry; they grow and develop in accordance with nature's laws.

Here, it may seem, there is another loophole for God. If God did not create life, in the sense hitherto believed, can it not be said that he created the laws by which life comes into being? If God did not, who did?

This puts the question right back at its starting-point. For if God himself is a living, willing and acting being, there must be laws by which he himself lives, wills and acts; and those laws must have been in existence prior to God. He could not have created and established the laws of nature before he existed himself.

Let us see in more detail what is meant by that. I am sitting at my typewriter reluctantly hammering out this article. In doing so I am making use of a number of very complicated movements, both mental and physical. To begin with, ideas are presenting themselves to my mind, and certain areas of my brain are functioning in response to the stimuli they receive. One idea serves to introduce a host of others, from among which certain ideas are retained whilst others have to be rejected, as being irrelevant or leading to unprofitable side-issues. This cerebral activity is all being carried out because there are natural laws by which the human brain works, and these laws existed before my brain existed. There is, for instance, the law which governs the causal association of ideas, and so regulates the continuity of thought. That is a psychological law; there are others that preside over the purely physical changes in the brain cells. Then from my brain impulses are being conveyed like signals through nerve channels to my arms, hands and fingers. Again, this neural energy functions strictly according to physiological laws—that is, laws which govern the body as an integrated whole. These laws are the same for your body as for mine; in a slightly different form they are the same laws for the body of an animal. And as laws they certainly existed before my body, or yours or the animal's. Had they not done so there could be no means whereby my body, or yours or the animal's, could carry out any actions whatsoever.

It is clear, then, that if God is a living being, willing and acting in any manner, he must from the beginning have done so because there were already laws, mental and physical, which enabled him to do so. In other words, the laws must have preceded God; he could not have created them.

So there is, after all, no loophole here for God. We are back again at natural law, which could not have been created by anyone, since the very act of creation needs some law by which it can be performed.

But, the theologian will object, this is a very anthropomorphic conception of God, and the idea of him as a kind of super-human being is no longer held.

Very well; but behind every theistic religion, no matter how

carefully concealed, there is the idea of a personal God bodiless, maybe, yet still having the mental properties of personality, a being in every important respect like ourselves. It cannot be otherwise, for if God is stripped of all personality he becomes nothing but natural law, mere abstraction. It is only an anthropomorphic God, a God in the likeness of man, that can be loved, worshipped and endowed with moral qualities. Only a God who has personality can have love, pity and concern for human beings. These are menial qualities; in the language of psychology they are personality-traits. One cannot love the law of gravity, or the force fields of nuclear physics. As H. G. Wells pointed out, unless God is a person he is nothing at all.

If the scientist is able to produce living cells in a test tube, it might be supposed by some people that the scientist has become God. There is in fact a growing tendency to look upon the science laboratory as a temple. But to follow out the analogy we must regard the scientist not as God but as a High Priest. Of what? Of natural law. He is the interpreter, the revealer and the adept of natural law. He strives to master its secrets so that he can manipulate it. Thus he is also the priestly intermediary between man and the natural laws which are above, within and around him; he, the scientist, seeks to use these laws to man's advantage and to protect man from the consequences of misusing them.

But the scientist is still himself man. He cannot usurp the functions of God as a creator because, as we have seen, even

God cannot perform such functions. Whilst the scientist can legitimately hope to understand natural law, he cannot hope to alter it. Whatever effects he may be able to produce must potentially be already in existence, and must have been so always, because they are effects which cannot be brought about independently of natural law.

When a sculptor carves a block of marble he releases from it a form that was already potentially in it, together with an infinite number of other possible forms. So it is with the scientist; the block of marble out of which he conjures his various results is the universal natural law, or aggregate of laws, which contained within themselves the potentiality that he has been instrumental in realising. He can no more create a new set of natural laws than the sculptor can create or fundamentally after the nature of his medium, the block of stone. The scientist, like the sculptor, has always to respect the material with which he works. Only in that way can he get good results, or any results at all.

The real object of knowledge, therefore, is not the thing produced, but the laws that condition its production. We are on the way towards understanding the origin of life on this planet by studying the laws of its nature, the patterns of causality that regulate its moment to moment existence. In those laws its past, present and future are all contained, just as in a seed there is not only its present condition but the tree that produced it and the tree it will become.

But what, precisely, is meant by a law? In nature the word

stands for a causal process, a continuity of events that, given all the constituents, could not have proceeded differently. Much confusion has been brought about by thinking of natural law in terms of legal enactments. It is probably this which has befogged the issue, making it appear that a God was necessary to formulate the laws of the universe. In reality, law is identical with the nature of phenomena; a thing is what it is because of its nature. Here the Pali word *dhammatā* expresses the idea better than any other. Dhammatā means just this identification of a thing or condition with the natural order to which it belongs. Everything observable has its own *dhammatā*, its own place in the pattern of causal continuity, and its own mode of being. And this peculiar and irreversible condition governs it throughout the innumerable stages between its arising and its passing away. The leaf, from green and moist, becomes yellow and shrivels up, until it is brown and dry, after which it disintegrates. Everything that constitutes it changes—or rather, one state succeeds another, with nothing remaining to identify one state with another except their causal dependence upon one another-but its *dhammatā*, the characteristic and inevitable nature of its processes, is a part of it, the only constant part, from first to last.

Whilst the bio-chemists are trying to manufacture living cells, the physicists are making their own contribution to the study of life. They have made electronic devices which after a fashion react to stimulus in the same way as do living organisms. The electronic tortoise is one example of this; it is a machine so constructed that it has a variety of responses to meet different situations. This is made possible by the principle called 'negative feed-back' by which, when one response is insufficient or unsuitable to meet the requirements of the action to be carried out, another, different, response is substituted by compensation. Basically, the principle is the same as that employed in thermostatic control of temperatures. The reactions thus produced correspond so closely to those of living organisms that the machine seems to have a kind of will. It appears to choose what actions it shall perform. In reality, of course, there is no free choice; what actually happens is that out of a large but limited number of possible responses, one is brought about because it is the inevitable result of a particular combination of causes. It is therefore fully predictable. But the similarity between this and human and animal reactions is so striking that it suggests (1) that they too are nothing more than highly complicated electronic machines, and (2) that their freedom to act is as illusory as that of the mechanical tortoise. Both the machine and the animal, it is thought, are wholly dominated by causal necessity; they respond to external influences as they have been conditioned to do by their built-in range of possible actions. The theory is certainly one that has to be taken seriously if for no other reason than that it gives powerful support to the already substantial evidence in favour of mechanistic determinism. We shall need to examine its

philosophical implications more closely later on.

For the present, let us turn back to the cell-tissue which is, according to reports, absorbing nourishment and developing along the lines of organic life in the scientist's test-tube. Let us go a little further than the biologists themselves and suppose that a living, sentient organism of a rudimentary kind has been produced artificially. We have already seen how this situation affects the theory of a creator-god; let us now take a look at it from the Buddhist viewpoint.

One of the cardinal doctrines of Buddhism is that of dependent origination: All phenomena in the universe, seen and unseen, arise through the combination and interaction of causes. Of these causes, some are visible—the purely physical causes—and others are invisible. The latter are the psychological causes, of which we see the results but cannot see the forces which bring them about. These forces, nevertheless, are not in any sense supernatural; they are as much a natural part of the causally-regulated universe as are the physical processes. Buddhist dependent origination or 'arising by way of condition', may be called a closed system, in that it has no alternate beginning and needs no external support. It is a self-sustaining process, not subject to the boundaries of the space-time complex and therefore needing no point of origination. To ask when it began is to pose a question as irrelevant as that of how it began. Since it contains within itself the principle of pure duration, which is time itself, manifested in change, it does not require any

external time in which to locate a beginning: To introduce a God, or a first cause in any shape, would be like putting an extra wheel into an already perfect piece of mechanism. It would only jam up the works.

It follows from this that the life which began on this earth, or in this universe, was not the first life to be manifested. No matter how the present universe may have begun there were other universes before it and they too evolved sentient life, which ran its course and disappeared with them. It is quite immaterial whether the theory of the pulsating universe or that of the steady-state cosmos is true; the principle of cyclic continuity holds good for either. Whatever exists must have had an antecedent cause, of the same general nature as itself.

So when we are considering the origin of life on our planet we are not thinking of the first appearance of something that never existed before. We are dealing, instead, with an isolated section of a process continuous in relation to space and time. A process, in fact, without which space-time itself could not exist. ^[7]

Omniscience and the Buddha ^[8]

The range of knowledge of a Supreme Buddha (Sammāsambuddha) is said to be acinteyya, 'that which is unthinkable, incomprehensible and impenetrable'. It passes beyond not only that of the ordinary worldling (*puthujjana*), but even that of an Arhat. Whereas the Arhat has eradicated the āsavas and the kilesas and has attained the extinction of suffering, with or without the higher spiritual powers (abhiññā), the Buddha has not only done this but has acquired certain additional faculties, and above all certain superior forms of insight which constitute his knowledge regarding causality and relationships in the world of phenomena. Many of these insights he cannot pass on to others because no one else is capable of understanding them. For this reason it is profitless to discuss whether the Buddha was aware of all the facts known to science today, and much else besides, or whether he deliberately confined his attention to those things which were directly concerned with his ministry. We have it on his own assertion that he knew many things which he had not passed on to his disciples; but they were all things irrelevant to the needs of one seeking emancipation. It is not at all unreasonable to assume that the Buddha, with his complete knowledge of the nature of causes and effects, could have worked out for

himself all the discoveries of present day science, had he wished to do so. Since scientific knowledge can be approached only by stages, each new discovery being an extension or modification of knowledge already possessed, a Buddha who knew all the facts 2500 years ago would have been unable to teach them to minds totally unprepared for them. Einstein's theory of relativity is a logical outcome of the multiplication tables learned in kindergarten, but it is a long way removed from them and no one would dream of trying to explain relativity to the child who had just mastered the fact that five plus five makes ten.

But there were many more useful ends to which the Buddha could apply his supernormal knowledge. One example of the difference between a Buddha and even the most distinguished and accomplished of his disciples (sāvaka) is seen in a story related about Sāriputta. It appears that Sāriputta preached to a Brahmin who was on his deathbed, taking as his theme the means of obtaining rebirth in the Brahma worlds. When asked by the Buddha why he had selected this subject, Sāriputta replied that, knowing the longing of Brahmins for union with Brahma, he believed that this kind of discourse would have the strongest appeal, and so the most potent influence for good, on the mind of the dying man. But the Buddha said that the Brahmin in question had actually possessed the good predispositions for attaining Arhatship in that very life, and would have done so if Sāriputta had preached to him on penetrative insight. In the result, however, he had been reborn in the

Brahma world and his emancipation had thereby been delayed for the enormous period of a Brahma's life-span. The Ven. Sāriputta's error in judgment was the consequence of his not possessing the full insight into the nature of others which constitutes part of Buddha's knowledge. The term sabbaññu is often found applied to the Supreme Buddha. It is formed of the combination sabba (all, everything) and aññū (the knower), and where it occurs in the form sabbaññūta-ñāņa it is generally taken as being allcomprehensive in knowledge. However, although these words are of fairly frequent occurrence, especially in the later texts of the Pali canon, the word does not find a place in the formal list of the Buddha's attributes which begins Bhagavā Araham Sammā-sambuddho, Vijjācarana-sampanno, etc. This appears to be the oldest description of the Buddha, and the one given and approved by himself, and it has therefore been questioned whether the Buddha did make for himself the claim of sabbaññūta-ñāṇa, and if he did, precisely what the term signifies. In English it is generally translated 'omniscience', but before this word can be given full approval for Buddhist use it is well to consider some of the implications it carries, and to define it in such a way as to make sure that its use is not infected with meanings foreign to Buddhism. That is what I propose to do in the discussion that follows.

Theological Omniscience

In theistic religion, omniscience is given as one of the chief attributes of a personal ^[9] God. It is then coupled with another attribute; that of omnipotence. Omniscience means all-knowledge, and omnipotence means all-power. In giving these attributes to God, however, certain philosophical difficulties have been created. If God is all-powerful, it has been said, man's actions are entirely under God's control, and no freedom of choice is open to man. An echo of this is found in the Old Testament Bible, where God 'hardens the heart' of Pharaoh and causes him to resist Moses' supplication to let the Israelites go out of captivity. In the eyes of the ancient theologians it would have been a presumption to allow Pharaoh, the creature, power to oppose his own will to that of God, his creator, and to prevail against him, even if only temporarily. So to avoid the difficulty they were obliged to make God work against himself, with Pharaoh as the inert victim. He opposed God's will, as expressed through Moses, only because God willed him to do so.

A more sophisticated theology of later days sought to overcome the difficulty of reconciling God's omniscience with man's moral responsibility in choosing between good and evil in a different way. It asserted that in order to give man free will, God had voluntarily limited his own omnipotence. But this carries the suggestion that God might have withdrawn himself completely from participation in human affair's, as indeed appeared to be only too likely, judging by the state of the world at various times in history. Certain Christian churches, such as the Calvinist, never accepted this theory of God's self-limitation as an attempt to save man's free will. They insisted that since God is omnipotent all things are under his control and the whole course of events has been laid down from the beginning. This is the doctrine of predestination; and it follows from it that all those who are to be saved have been saved from the moment of creation, while those who are damned are irremediably doomed to that end, having no control over their destiny at all.

Then what of omniscience? In the theistic sense, omniscience stands for full knowledge of everything existing in the past, the present *and the future*. In the omniscient consciousness of God, the knowledge of past, present and future exists in a state of timelessness which is sometimes called the Eternal Now. This theory would mean that the familiar time sequence of past, present, future has no real existence outside man's consciousness. There is much to be said in favour of this view, apart from its connection with theology, and it deserves a little closer examination.

The picture it offers is something like this. Our consciousness resembles a man walking along a winding path bounded by high hedges. The spot he is on at any given moment is the *present* for him, and when he has left it behind it remains in his memory as the *past*. He has thus two objects of knowledge; he knows the present by direct experience of his immediate situation, and he knows the

past by his recollection of it, or such recollection as is consciously present to him at a particular moment. He has no knowledge of what lies ahead of him on the road. He may make guesses, and more or less intelligent ones, but he has no certain knowledge even that there is any continuation of the road beyond the next bend. So his knowledge of it embraces only those parts of the road that he knows for certain to exist, namely, those he has traversed and the one he is on. Nevertheless, the road does continue beyond the point he occupies, and its continuation forms the unknown future which is already in existence and has been fixed beforehand. But to an observer looking from above, all parts of the path are equally visible at the same moment, as, for example, the paths of Hampton Court maze would be to someone looking down on it from a helicopter. This is the theory which Dunn put forward in his book An Experiment With Time, and it is such a vision of the past, present and future all existing simultaneously, that is said to constitute God's omniscience. It clearly states that the future is already present as *now* in the consciousness of God, though not in that of man. What it also implies is that the future cannot be altered by man, though it may presumably be altered by God if he wishes to use his omnipotence to that end.

At this stage the analogy becomes a rather difficult one to pursue, for the following reasons. (1) We have to assume that the man's form of locomotion is such that he is impelled to walk forward (he cannot stand still, because time cannot be stopped, except subjectively), and he cannot turn around and retrace his steps along the path he has already taken. We cannot reverse our motion through time (or time's motion through us, as the case may be) and reenter the past. (2) For the picture of the road ahead to be seen by the omniscient eye absolutely accurately, it must include the man traversing the road at, every point in the future, so long as he is on it, as well as in the past. The number of points in a line being infinite, it follows that an infinite number of pictures of the road and of the man on it, must be present to the omniscient consciousness simultaneously. It does not matter whether there is equal awareness of all of them at the same time, or whether different points can be selected for attention by the omniscient consciousness. What is significant is the conclusion that every position of the man in the future is equally true, because to be knowable it must be a fact. If it were merely conjecture, no matter how probable it might be, in terms of conjecture, it would still not be a fact, and so could not be an object of direct knowledge. What is seen by the omniscient eye, therefore, is a something which we have not yet seen, but which is bound to happen. This conclusion seems to me to be inescapable.

Here it becomes advisable to make a distinction between certain concepts which frequently become confused in the discussion of free will and determinism. We will begin with prediction.

There are two possible forms that prediction can take. The first is the forecasting of future events on the basis of

probabilities. Thus a professor may predict that a certain student will pass his examination, on the basis of the student's class record. Or a doctor may predict that a patient will die within a certain time because the disease he is suffering from is a fatal one. (And here the word 'fatal' merely means that the disease in question can normally have only one ending). But it is not absolutely certain that the student will pass his examination; he may be distracted from his studies before the course is over by falling in love, or he may be stricken with an attack of nervousness in the examination hall. Neither does the doctor know for certain that his patient will die, since many people have recovered from diseases that are usually fatal; and besides, a new wonder drug may be discovered in time to save the patient's life. In both these instances, what we mean by 'prediction' is merely an informed guess, founded upon a knowledge of causes and their (usual) effects. The knowledge involved in them does not extend beyond the past and present, what lies in the future being only an assumption derived from that knowledge. The claimed predictions of astrology belong to the same class, although they are believed to include causal factors that are not admitted to be such in a scientific view.

The other form that prediction can take is radically different from this. It embraces all kinds of experience in which a future event is actually *seen* as occurring, and is reported before it takes place. The clairvoyant who claims to see pictures of forthcoming events in the crystal, the person who sees a future event in a dream and the waking visions of events that have not yet happened, all come within this class of experience upon which prediction can supposedly be based. But if they are veridical, i.e., if the experience of seeing an event is followed by the event occurring precisely as it was seen in the crystal, dream or vision, then it has been a subject of *foreknowledge*. That is to say, the event was not conjectured, as in the previous instances, but actually known beforehand as a certainty and a fact. The implication from this, I think, is clear: it must mean that the event so known actually existed in the otherwise unseen future, at the time when it was seen in the present.

This form of foretelling the future is therefore, as I have said, completely different from predictions belonging to the first class, in the nature of the information on which it is based. The professor who predicts that his star student will pass his examination is aware when he makes his prediction that many other events may intervene to prevent his prediction from coming true. The 'seer' who predicts on the basis of what he has *seen* is able to ignore cause-effect interference when he makes his prediction, for the fact that he has seen the future occurrence is proof to him that it will come about; in fact, that it has already occurred. His experience is precognition, or fore *knowledge*, and his prediction is only a by-product of that foreknowledge.

It will be seen at once that if only prediction in the first sense is possible, as it is usually assumed to be, there is room for the exercise of choice in one situation after another.

The student, for example, may decide for reasons of his own that he does not want to follow the profession for which he has so far been studying, and may wilfully fail his examination as a way out. But if a crystal-gazer sees the student in his graduation gown, receiving his diploma, and his vision is veridical, it is knowledge of something that exists as a fact, and nothing can prevent the student from passing his examination, neither external causes nor his own will to fail. It means, in effect, that he is bound not to fail. In that case, the future is fixed; it has already been predetermined at the time when the clairvoyant saw the picture. This is the meaning of the concepts fatalism, determinism and predestination. It is difficult to avoid the conclusion that, if such pre-knowledge is possible, freedom of choice and of action are not merely limited (as we know them to be, from observation), but they are completely absent. What we will, or think we will, to do is simply what we have been predestined to will from the beginning of our lives, and before. It is necessary to insist upon this point, because it represents the greatest stumbling-block raised by attributing omniscience to God. Just as God's assumed omnipotence deprives man of free choice, so also does God's alleged omniscience. In order to save free will, theology has had to put forward the doctrine that God intentionally restricts his omniscience just as he does his omnipotence.

But the two cases are not exactly on all fours with one another. Omnipotence may circumscribe its own power (in fact, an omnipotence which could not do so would obviously not be omnipotent); but whether God voluntarily limits his power of foreknowing, or does not, the fact remains that if such foreknowledge is possible (whether it is exercised or not) the future is already fixed; and the conclusion is still a rigid determinism. And it is not the determinism of science, which, however rigid it may appear, can never entirely exclude man's free choice as a causal agent in the course of events, but a determinism that is absolutely inflexible precisely because it is not subject to causality; it is a pattern that cannot be changed by the interference of fresh causal factors. And it would appear that this necessarily follows from omniscience if it is to be considered as a fact, whether it is attributed to the Buddhas or God.

It should be understood that what I have just asserted is true only if all events can be precognized. Here there is a possible way out of the dilemma, and I shall return to it later. But if only some events, and not all, can be the subject of foreknowledge, an omniscience that extends into the future is not possible. By definition, the word omniscience excludes any possibility that there can be events outside its range. If there is any possibility of such events, then omniscience does not include complete knowledge of the future.

Knowledge and Belief

We have seen that prediction is belief based upon inference, whereas precognition can be called knowledge of the future. We shall now turn to another aspect of the problem.

So far, I have been using the word 'knowledge' without giving attention to the epistemological issues that it raises. Precisely what do I mean when I say that I know something to exist or to be true? Here, it is possible to err rather badly by over-simplifying terms and their meanings.

Nevertheless, the risk must be taken, since the problems of epistemology are too complex to be discussed at length in this paper. All that is needed for the present purpose is to clarify some common misconceptions. This can be done by recapitulating a few of the basic axioms that have been accepted since the time of Plato.

The first definition that offers itself is that knowledge is what is directly perceived through the senses. This proposition means that perception is infallible, because for any individual the way he perceives things is the way they are. If a man says that the curry he is eating is hot, he is stating what to him is a fact, and he knows it to be so. But it is not so for a man who is more used to hot curries, and to whom the same dish may be very mild. This idea of knowledge therefore leads to solipsism and a relativistic view of truth. It excludes all possibility of ever knowing what is objectively true.

Then, can knowledge be defined as correct belief? The idea that it could be so called seems very plausible, but on
examination it reveals fatal defects. A certain belief may agree with the objective fact to which it relates, yet the grounds for holding it may not be correct. It may be the result of indoctrination or prior conditioning, whereas for it to be true knowledge a full understanding of what is known is required. Furthermore, when holding a belief that happens to be true, one may form a judgment which is accurate but which nevertheless is based upon false or insufficient grounds. A belief about something which is true may be arrived at without any knowledge whatever of the matter it concerns.

A third possibility is that knowledge consists of true belief, together with the ability to give an account of it. But a belief which the holder of it can express in words, even if it be a true belief, is not necessarily accompanied by knowledge; the account given of it may be an acquired formula. Even if the account includes an accurate enumeration of all the elements that enter into and form the belief, it still does not amount to knowledge. For example, the difference between a physiologist who knows how the human body works, and a medical student who has a correct belief about it does not consist solely in the fact that the former can give a correct description of all the organs and other parts of the body. (The case is a hypothetical one, for in fact there is no physiologist who knows in all details how the body works; but it will do for our purpose). Evidently, something more than this is required to differentiate knowledge from belief. It may be held that to give an account of a thing means to be able to describe the features that distinguish it from other things. But the ability to mark and specify the characteristics that differentiate one object from another is an essential ingredient even of true belief about the objects; so that, too, is not enough to supply the need. Finally, the fact that a true belief can be put into words is not enough for it to constitute knowledge, for it makes no difference either to the truth or falsity of a belief, or to the reasons for holding it, whether the belief is expressed in words or held silently. In either case it is just a belief, and nothing more.

It would seem, therefore, that knowledge cannot be given a single definition. It requires a set of definitions, of which no one shall contradict another at any point. It is belief plus another element, and that element must be either derived from something that has a real existence outside the realm of subjectivity, or else is a factor of universal experience. Whatever the element may be, we are still left with the difficulty of deciding how we can know that it exists, for we cannot entertain a definition of knowledge which includes knowledge itself.

The Objects of Knowledge

In the light of what has been said above, I am constrained to use the word 'knowledge' in what is more or less its commonly accepted sense. That is, I shall take it to mean a correct belief, or mental picture, arrived at by correct discernment of objective facts, and relating to an existing fact, event, or state of affairs. Using this as a working definition, although its semantic value may be questioned on semantic grounds, I shall try to show its bearing on the present problem by asking some simple questions regarding the objects of knowledge.

The first is this: Must an object in the external world, or an event in time, be an object or an event that exists, in order to be an object of knowledge? Or, expressed conversely, Can something that does not exist be an object of knowledge?

Here I think the answer must be that an object or a fact, an event or a state of affairs must be in existence before it can be an object of knowledge. It may be advanced as an objection that dragons and unicorns do not exist, but that nevertheless they are objects of knowledge. That is not the case, however; not because it conflicts with the definition of knowledge which I am using, but because it appeals to a category of thought that cannot be included under knowledge, in whatever sense one may be using the term. Mythological animals are objects of imagination, not of knowledge. They are made up of diverse elements taken from objects that do exist, such as the body and legs of a horse combined with a horn, and the body of a serpent joined to the body of a bat. We know that these things exist separately, but we do not know that they exist in combination as unicorns and dragons. We can say, correctly, that we know, these animals have been thought to exist, and

that we know what has been said of them but we cannot correctly say that we know there are unicorns and dragons. It has been asserted that God must exist, because he is an object of thought, and we cannot think about something that has no existence. But in this respect God is in the same case as unicorns and dragons: the mental image of God is composed of various features, such as the attributes of a loving father, of a just and stern king, and of a watchmaker, etc. all of which are drawn from the world of common observation and experience. Whatever other attributes we may choose to add to these in our picture of God, they must all be taken from items already known to us, to form the composite picture. When we think of God, it is in reality these features or characteristics that we think about, either separately or in combination. It is for this reason that I have ejected the 'attributeless' God from this discussion, for nothing can be postulated of him except that he is without attributes. The volumes of theology that have been written around the nature of God prove only one thing: that God is not an object of knowledge, though he can be an object of thought, imagination and speculation. And in order to be an object of thought he has to be personalised and endowed with features that are known to exist. Any other kind of God, impersonal or unmanifested, is a concept without meaning.

The next question requiring an answer is: On what grounds am I justified in saying that I know something? Here we have to exclude all matters that are only subjects of belief or of faith, not of knowledge. As an example of its application I shall take knowledge and belief in connection with the Four Noble Truths of Buddhism.

Regarding the first of them, dukkha sacca, we may correctly say that we know that conditioned existence is bound up with suffering, because this is an empirical fact so far as the existence we know is concerned. If there are forms of existence which are not conditioned, not subject to change and hazard, our knowledge does not include them; but we are amply justified in believing that there are no such forms of existence, because the analysis of what constitutes existence—that is, a process of incessant change taking place in time and subject to arising and passing away-shows that suffering is an essential part of it, if we take suffering to include, as we rightly should, unsatisfactoriness, agitation and restlessness. So what we can rightly say about the first Truth is that we know it is true as regards life on earth, but that we only believe, though on very strong grounds, that it is also true of all forms of life, wherever they may be found.

On similar grounds we may say of the second Truth, *Dukkha samudaya sacca*, that, we know suffering is brought about by ignorance conjoined with craving, because this, too, is something that can be verified by experience, of our own life and that of others. What we cannot say is that we *know* the ignorance and craving to have been operative in previous lives. So long as we are not able to recall our previous existences this must remain a matter of belief, and cannot be termed knowledge. All we can correctly *affirm* is

that we believe it to be so, not necessarily or solely because the Buddha said it was so but because the theory has much to commend it on logical grounds, and nothing decisively against it. In other words, it explains a good many things which call for explanation if life is to appear meaningful, and which cannot be explained so satisfactorily in any other way. A possible alternative to it is that life does not have any meaning, and that human value-judgments in terms of justice and right and wrong, good and evil, have only a limited validity for man himself, and none for the universe at large. This is not to deny that there are other interpretations, besides these, but they have little to commend them, and they must rest entirely upon unfounded assumptions, such as that suffering and death are the punishment for original sin.

When we come to the third Truth, *Dukkha nirodha sacca*, we cannot say that we know anything about it at all. Nibbāna, the cessation of craving and ignorance and of the process of becoming to which they give rise, is not a thing that can be verified by experience until the state of Arahatship is reached. Until then it must remain a matter of belief. But it is belief founded upon substantial grounds, in that it follows logically from the propositions accepted earlier regarding the nature of life and the causes (or rather, conditioning factors) of the life-process. We know it to be true that ignorance can be replaced by knowledge, and that craving can be controlled and reduced, so there is no reason why they should not be eliminated altogether. And if they are

finally eradicated, the state of peace, tranquillity and undisturbed security must be the result. If indeed there were previous lives in which the present sufferings were engendered through ignorance and craving, the series of such lives must come to an end with the removal of these factors. On the other hand, even if there is no such continuity of life after death, the benefits of reducing ignorance and craving can be experienced, and so known, in this present life. Thus the belief justifies itself pragmatically, as the Buddha pointed out.

The appeal to pragmatism, however, was only secondary, and for the sake of those who could not feel sufficient confidence in the statements about past and future lives to take up the course of training on the strength of them. A great deal of the evidence for believing in the third Truth comes from the testimony of those to whom Nibbāna was an object of knowledge, a direct experience, and who would hardly have declared it to be so if it was not. In this connection it is not without significance that the Bodhisatta had gained what the Brahmins considered to be Moksa (final deliverance) before he had attained Buddhahood, and was not satisfied with it. Such a Teacher would scarcely have been the person to be deceived in his own state of mind later on, and still less likely is it that he would have succeeded in deceiving others. For the experience of Nibbāna, as is shown by the minute analysis of mental factors in the stages by which it is reached, is no mere state of exaltation or self-induced fantasy; it is the goal of an exact discipline and is recognisable when it is reached.

The fourth Truth, Dukkha-nirodha-gāmini-pațipadā sacca, the Path to Nibbāna, is also a matter of belief, not of knowledge. But it is belief that is gradually transformed into knowledge as the path is followed and its results are increasingly experienced. The belief in the Noble Eightfold Path is also a logical outcome of the earlier propositions, to which consent has been given, for it is evidently an effective way of putting an end to craving. There is another important reason for believing in it, and that is the assurance given that if we follow it to the end, we shall actually experience its results in the present life; an assurance that opens up the possibility, at least, that we shall eventually be able to say of it that we know it to be true. So we are shown a graduated scale in which belief, initially prompted by observed facts, becomes strengthened until it turns into confidence (saddhā), and confidence ultimately gives place to knowledge.

If a distinction is to be made between belief and faith, as I think it should be, it is that belief is a state of mind less emotionally coloured than faith. It contains less of the element of wishful thinking. One may believe that there will be a third World War, but few people would say they have faith that there will be a third World War. The nearest approach to confusing the two attitudes is the case of the inveterate pessimist who hopes for the best, while confidently expecting the worst. Faith can exist where there are absolutely no grounds for belief. It is this kind of faith that theistic religion insists upon; and considered as a virtue, faith is most commendable when there is least reason for it. Paul had faith in something which 'to the Greeks was foolishness' and a scandal; Tertullian, in what he declared 'impossible'; and Kierkegaard, in what was 'utterly absurd.' Of course, the word 'belief' could be used in these contexts as well, but the total surrender of the intellect which is implied demands a stronger word, a word more emotionally charged, and 'faith' *fills* the bill. Such faith may be a virtue; I am far from saying that I *know* it is not. But quite obviously it makes the way clear for every kind of irrationality, mythomania and intolerance. History has shown that faith and hope are not always accompanied by charity.

Logical positivism, which admits only sense-data as legitimate objects of knowledge, would doubtless be dissatisfied with the definition of knowledge which I have adopted, *and* with the above attempt to distinguish between knowledge and belief. But I am not trying to lay down criteria for what constitutes knowledge. My present purpose is only to indicate, in a general way; what is meant by knowing as distinct from believing, and using as an example the fundamental principles of Buddhism. We may now go on to consider what bearing this has upon the question with which we started.

The answer given to that question was that it is only an object or a state of affairs which actually exists that can properly be called an object of knowledge. From this it follows, if the statement is true, that when a clairvoyant sees an event in the future, thereby making it an object of knowledge, that event must be really in existence as a fact at the time of being seen, i.e., *before it has happened*. ^[10]

Thoughts on Dhamma From the Author's Note Books

Desire

Many people are dismayed at the idea that all desire has to be abandoned; they cling to the belief that some desires are proper and even beneficial. But there is no absolute standard by which some desires can be said to be "good" while others are "bad." In that respect, desire is like beauty —its basis is conditional and relative. So we find that "beauty" and "desirability" are often synonymous. A beautiful woman who is loved by many men, may be undesirable in the eyes of some. Any object of desire, in fact, may be an object of repulsion to certain people and to most people in certain circumstances. [11]

It is our desires that bring us into conflict with others, and any desire may do this.

Furthermore, every desire carries with it the possibility of unfulfilment and is therefore a potential source of sorrow. Also, desire renews itself, fixing on one object, then another. When one object is gained, desire does not die out, except for that particular object. It transfers itself to a new object, and renews itself all over again. When people lack purpose in life it is because their desire is weak, or crossed by conflicting desires, for desire is purpose. Moreover, whatever is desired above all contending desires, with the full concentration of one's being, that desire must surely be realised eventually. But when it is achieved the desire may have subsided. So it is with the poor man who struggles for a lifetime to acquire wealth, and finally gets it only to find that his lust for it is gone—worn out in the expenditure of his vital energies. His desire then has to transfer itself to another object, or his life becomes void and meaningless. In the pursuit itself, not in the goal, lies the purpose of all worldly activity.

Thus it is the coming-to-be, or striving-to-be, this, that or the other, that matters. When the desired state is gained it becomes of necessity unwanted. As a state of being it loses the reality it had as an objective.

The "immortal soul" in eternity would not value its happiness because felicity would no longer be an object of desire. Sooner or later the soul would rise up against the futility of an aimless existence. Perhaps that is the symbolic meaning of the revolt of Lucifer. The knowledge of freedom and action depends upon desire. If all good desires are satisfied, the necessity of expressing the selfhood in will must seek objects of desire that are evil.

Saṃsāra

Towards man's aspirations and needs the universe is coldly indifferent. At its best it is a shop keeper from whom we can buy what we want; it never cheats, but it drives a hard bargain.

Pascal—A Quote and Comments

"Seeing the blindness and misery of man, the astonishing contradictions which appear in his nature, and beholding the entire universe mute, and man without light, abandoned to himself and as though straying in this corner of the universe, without knowing who has placed him here, what he has come here to do, what will happen to him after death, I become terrified like a man who has been conveyed, asleep, to a frightful desert island, and who awakes not knowing where he is and not having any means of escape; and thereupon I marvel how it comes about that one does not succumb to despair of so miserable a state."

—Pascal, quoted by Voltaire in *Lettres Philosophiques*. Transl. F. St.

Comment on Pascal

Voltaire criticises this passage severely. But I consider it very fine—the actual state of man without the Dhamma. It shows depths of insight into la condition humaine which the cool rationalism of Voltaire could never-encompass. If he could have shaken off the fetters of theology, what a fine Buddhist Pascal would have made, and how his tortured soul would have responded to it! And then we should have had one splendid passage of literature the less...

This sad, comical world which owes so much of its beauty to man's disease of mind and body, to his passions and torments and his wild beatings against the bars of an iron necessity that he is unaware he has created to imprison himself, will always be fundamentally the same. It will go on repeating itself with endless variations of the same themes, demonstrating the nature of continuity in change, so long as the unwholesome conditions are present to keep it going. (1968)

Thoughts on Dhammapada, Verse 37

"Faring far, wandering alone, bodiless, cave-dwelling. those who control this mind are freed from Māra's bonds."

The mind is 'faring far' because its power of projecting itself is limited only by the boundaries of conceptuality. It stops only at those things which are unthinkable. There are four 'unthinkable' (*acinteyya*) things which transcend the ordinary range of human thought: the sphere of a Buddha (*Buddha-visaya*); the sphere of the jhānas (*jhāna-visaya*); Karma-result (*kamma-vipāka*), and cosmic speculation (*lokacintā*), that is to say, the effort to comprehend the world in all its complexity, and especially to try to assign an origin to it.

Apart from these unthinkable matters the mind is able, to roam from subject to subject, over vast expanses of space and time, and it is beguiled by this capacity. As a result there can be day-dreaming, fantasies of the imagination or, in mental disturbances, hallucinations. On the positive side, the mind's ability to roam at large can produce great creative works of art and insights that lead to major scientific discoveries. But for these ideas to be fruitful they must be the result of disciplined thinking; not of aimless mind-wandering.

The mind is wandering alone because essentially every man's mental world is isolated. At certain points it touches others, and communication helps to throw bridges across the gulf that separates one man's subjective experience from that of another; but in the depths, every individual's life is lived alone. The consciousness of that solitude is a cause of anxiety.

John Donne wrote: 'No man is an island.' In one sense it is true. Socially, man lives committed to others and in a situation of mutual responsiveness. His actions, even his thoughts unexpressed, affect others, and theirs have an influence upon him. His collective and public life is one of responsibility to people he has never seen, connected with him by intricate and invisible threads of action and counteraction, so that a movement in one place affects every other section of the web.

But in a more radical sense, man is an island. It is within himself, and alone, that he must confront his uniqueness in the world and find his salvation. 'Be islands unto yourselves', the Buddha said. The meaning was not that man is not an island, but that he must realise his selfresponsibility in isolation. To know that he is an island, one with all, yet essentially alone, must become his strength. It is when there is need of dependence, but nothing to depend upon, that fear arises. We have to accept the truth of our solitude, our solitariness in the inner world of the mind, and make it our strength.

The mind is *incorporeal*. Here we have another truth that is beyond the mind's power to grasp. For mind and body are so intimately associated and stand towards each other in a relationship of such close interdependence that the two appear inseparable. The state of the mind affects the body, for good or ill. The body just as certainly affects the mind. Disease in either, or damage to either, can have its repercussions in the other. But the cerebral cortex is not the mind, as Max Loeventhal has pointed out. The mind itself has no location. It appears to be situated in the body only because the senses furnish it with the information about the external world which is required for the processes of thought.

Mind is the name of an activity, a continuing process. That is how it was viewed by William James and is described in most systems of psychology today. It is perhaps unfortunate that in English, "mind" is usually accompanied by the definite article. When we speak of "the mind" we, seem to be referring to something if not substantial, at least having a hylozoic nature and a consistency of being that distinguishes it as an entity which it has not and is not. ^[12]

Notes

- **1.** That is, in the sense derived from our world of five sense experience. (Ed.)
- 2. Translated in *"Anguttara Nikāya, An Anthology: Part I"* (The Wheel No. 155/158), p. 43.
- 3. *Saṅkhāra* is identical with kamma only where this term is applied in the context of the Dependent Origination. (see next chapter). *Saṅkhāra* in the sense of the aggregate of mental formations (*saṅkhārakhandha*) is not restricted to kamma. Several of the mental factors grouped in that aggregate occur also in non-kammic, i.e., resultant and functional (*kiriya*), consciousness. (Ed).
- 4. On this subject, see also "*Dependent Origination*" by Piyadassi Thera (The Wheel 14/15) and "*The Significance of Dependent Origination*" by Nyanatiloka Thera (The Wheel, No. 140).
- 5. For readers who wish to know more in detail about the various types of kamma and how they function, an excellent summary of the subject will be found in Nyanatiloka's "Buddhist Dictionary".
- 6. An incompleted essay. Title supplied by the Editor.
- **7.** Here the manuscript ends. (Ed.)
- 8. An uncompleted essay. (Ed.)

- I do not intend to deal here with the idea of an impersonal God, the neuter Brahman of Advaita philosophy. A God without attributes *ipso facto* cannot be discussed, and is to that extent meaningless.
- **10**. Here the manuscript ends. (Ed.)
- **11**. This idea has been expressed by Āryadeva (3rd century C. E.), a Buddhist philosopher of the Madhyamika school, as follows:

"By the same thing, lust is incited in one, hatred in another, and delusion in the next; hence senseobjects are without (inherent) value." *Catuḥśātaka*, ch. VIII, v. 776. (Editor, The Wheel.)

12. Uncompleted. (Ed.

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